FISCAL YEAR 2008

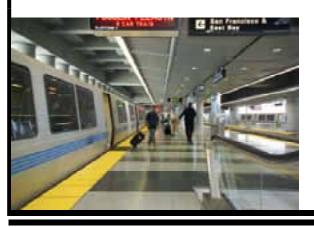
Short-Range Transit Plan

FY08 THROUGH FY17

&

Capital Improvement Program

FY08 THROUGH FY32



September 2007

Fiscal Year 2008 SHORT RANGE TRANSIT PLAN FY08 through FY17

and CAPITAL IMPROVEMENT PROGRAM FY08 through FY32

San Francisco Bay Area Rapid Transit District

Board Adopted September 27, 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 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 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). This report has been prepared in conformance with MTC guidelines for SRTPs and Capital Improvement Programs (CIPs).

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 report reflect the views of the San Francisco Bay Area Rapid Transit District (BART), which is responsible for the facts, and accuracy of the data presented herein. The contents do not necessarily reflect the original views or policy of the USDOT. This report does not constitute a standard, specification or regulation, and does not preclude future labor contract negotiations or future BART Board deliberations regarding fares.

All projects discussed are subject to state and federal environmental review as required by law. Specific projects and project funding are subject to approval by the BART Board of Directors. Projects that do not yet satisfy these requirements are proposed projects.

Copies of the FY08 Short Range Transit Plan and Capital Improvement Program will be available on BART's website at www.bart.gov. Copies can also be obtained by sending an email to srtpcip@bart.gov or a request in writing to BART SRTP/CIP, 300 Lakeside, LKS-16, Oakland, California 94612 or by fax 510 287 4751.

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Executive Summary

San Francisco Bay Area Rapid Transit District's (BART) Short Range Transit Plan (SRTP) and Capital Improvement Program (CIP) provide financial forecasting and capital planning information in support of the District's mission to provide safe, reliable, customer-friendly, and clean transit service in the San Francisco Bay Area. The SRTP and CIP are produced together to present a comprehensive picture of the District's operating and capital plans.

The SRTP/CIP is divided into five chapters, and highlights from each are described below.

<u>Chapter 1</u> provides context and describes key accomplishments as well as areas of concern.

Achievements since the last SRTP/CIP include BART's:

- Taking on responsibility for financing SFO Extension operations
- Recording all-time highs in ridership
- Making progress in defining its Second Generation Renovation Program to ensure the system can continue to run well
- Reinvesting in the system to address Strategic Plan emphasis areas of *our customers*, by adding cleaning staff for trains and stations; *our people*, through employee development and training programs; and *our future*, by allocating funds to capital needs.

The District must remain cautious in its financial planning because the economy is slowing and medical and healthcare costs continue to escalate at a rate that threatens the District's economic well-being. The District's strategy is to make funding decisions in a long-term context by using SRTP/CIP financial forecasts to inform budget decisions.

<u>Chapter 2</u> gives an overview of the 43-station BART system, including its organization, the service provided, the fares for this service, and the extensive physical infrastructure that is required to provide it. Key highlights are:

- For FY08, BART has 3,336.5 operating and capital employees, 87% of whom are union-represented
- BART operates five lines in Alameda, Contra Costa, San Francisco, and San Mateo counties; effective January 2008;

- Fares will increase an average of 5.4%, as part of the Board-approved productivity-adjusted Consumer Price Index (CPI)-based fare increase program
- o Headways for Monday-through-Saturday evening and all-day Sunday service will be shortened from 20 minutes to 15 minutes
- o BART will improve service by providing two-route service to three of the five SFO Extension stations
- BART has introduced its Strategic Maintenance Program (SMP), which is a proactive maintenance operation aimed at continuous improvement through strategically engineered, planned and scheduled maintenance and overhaul activities.

The BART system is evaluated in **Chapter 3** by using goals, performance measures, and benchmarks. The BART Strategic Plan is a major resource for this evaluation, in keeping with the MTC Triennial Performance Audit's recommendation to more closely align the SRTP with the Strategic Plan.

Main findings are as follows:

- BART is currently updating its Strategic Plan, which is proposed to have three areas of emphasis that are distilled from the current seven focus areas. These three are Our People, Our Customers, and Our Future. The BART Metro vision currently being developed will become part of the Regional Rail Plan, which will be the foundation for MTC's 2009 Regional Transportation Plan (RTP).
- The next SRTP/CIP will fully incorporate the updated Strategic Plan; for the FY08 SRTP/CIP, performance measures were used from the four most relevant focus areas of the 2003 Strategic Plan, which showed:
 - BART customer satisfaction exceeds the 80% benchmark with 85% of customers surveyed in 2006 reporting their overall satisfaction as very or somewhat satisfied.
 - o BART's equipment and service reliability continue to perform above benchmark. BART's customers have expressed concern about train and station cleanliness, and in FY08 BART is funding additional cleaning staff.
 - BART's financial health is good, with an operating ratio above the benchmark at 67%, operating costs tracking below inflation, and a solid credit rating. However, BART's reserve available for economic uncertainty of \$15.8M is far below the \$26.7M benchmark, which is equivalent to 5% of total annual operating expenses.
 - BART as a lead agency with MTC and Caltrain is developing the Regional Rail Plan, with objectives that include integrating passenger rail systems and improving interfaces with connecting services to increase travel by transit

• Ridership is a key indicator of the District's success and BART is recording alltime ridership highs of over 389,300 trips on August 31, 2007 and 101.7 million trips for FY07.

<u>Chapter 4</u> provides forecasts of rail ridership, service plans, and operating finances. Highlights from this area include the following:

- Average weekday trips are projected to increase by more than 50,000 to just over 400,000 by FY17.
- Increased ridership will require all available rail cars for revenue service, at increasingly higher load factors.
- The operating financial forecast projects deficits for the next five years. After that, as debt service and other allocation requirements decrease, some financial capacity is available.
- The financial forecast includes the new financial agreement among BART, SamTrans and MTC for the operation of the SFO Extension and the arrangement with MTC for repayment of the \$60 million SFO Extension loan.
- Until additional bonding is required to fund future renovations, the financial forecast indicates capacity to restore operating reserves to District policy levels and fund its share of the Earthquake Safety Program, as well as to provide required matching funds for a future system renovation program.

<u>Chapter 5</u> contains information on the Capital Improvement Program. The following are key points from that chapter.

- The FY08 CIP time horizon has been expanded from 10 years to 25 years and the period covered is from FY 2008 through FY 2032. This CIP consolidates the previous years' CIP and the 2006 30-year Capital Plan into one document, improving consistency and ease of administration as the programs are advanced for funding considerations.
- The FY08 CIP shows the combined total Track One and Two capital needs of \$11.4 billion. The total committed funding (programmed and planned) is estimated at \$5.6 billion and the capital shortfall is \$5.8 billion. The shortfalls are in the following programs:

System Reinvestment: \$3.3 billion
 Security: \$0.2 billion
 Service and Capacity Enhancement: \$2.3 billion

In the 2006 30-Year Plan, the funding shortfall was \$2.6 billion, which comprised the following programs:

o System Reinvestment: \$0.1 billion \$0.2 billion o Security: \$2.3 billion o Service & Capacity Enhancement:

- The \$3.2 billion funding shortfall increase in the FY08 CIP is all in the System Reinvestment program. The reasons are:
 - o \$2.2 billion of the increase is attributable to the Vehicle Reinvestment Program for fleet replacement and the C Car Upgrade. The FY08 CIP uses a more conservative approach in calculating revenue funding as compared to MTC's methodology. MTC assumes 100% funding for this program but in the FY08 CIP, the District only considers the total programmed funds of \$90 million as revenue (this portion of the program is shown in Track One).
 - o \$0.6 billion of the increase is due to the funding shortfall in the Mainline & Facilities projects (\$0.1 billion), and the Controls and Communications projects (\$0.5 billion).
 - The remaining \$0.4 billion increase represents a 5% escalation applied to the \$8.1 billion total capital needs identified in the 2006 30-Year Plan.
- The System Renovation and Vehicle Reinvestment Programs are updated versions of in-depth analyses performed for the series of capital presentations made to the Board in 2006.
- Appendix B has been replaced by a summarized Station Planning, Access and Transit-Oriented Development Update report. The Station Status Report from the previous CIPs will be reported separately from this year's CIP.
- Appendix D Track Two System Reinvestment projects are grouped into asset classes, consistent with MTC's Regional Transit Capital Inventory classification. This new approach ensures the capturing of a broader spectrum of the District's project needs for the next 25 years and thereby increases the funding potential of those projects.

CHAPTER

Introduction

The Short Range Transit Plan (SRTP) and Capital Improvement Program (CIP) present financial forecasting and capital planning information in support of BART's mission to provide safe, reliable, customer-friendly and clean transit service in the San Francisco Bay Area.

Although producing the SRTP and CIP is a regulatory mandate, BART emphasizes the documents' usefulness far beyond compliance requirements and has expanded the forecasting, analysis and content in both, presenting them as one document. The District takes this approach to give the reader a comprehensive understanding of the history and scope of the District's operating and capital plans as well as a prospective look at BART's financial opportunities and constraints.

The rest of this chapter sets out BART's accomplishments and challenges since the last adopted Fiscal Year (FY) 2006 SRTP/CIP, changes from that document, and the SRTP/CIP's relationship to other BART documents and other agencies.

1.1 BART's Recent Accomplishments and Challenges

Since the adoption of the FY06 SRTP/CIP, the District has made some important accomplishments, yet still faces significant challenges. The District's key accomplishments include the following:

SFO Extension. During FY07, with the aid of the Metropolitan Transportation Commission (MTC), BART and the San Mateo County Transit District (SamTrans) reached a resolution regarding the financing of operations to the five San Mateo County stations south of Daly City that make up the SFO Extension. The resulting agreements turn the operation of the Extension over to BART, with monetary contributions from SamTrans and MTC to offset the cost of operating outside the District.

Ridership. BART's ridership has been steadily increasing over the last two years. An all-time ridership high of 389,300 trips was recorded on Friday, August 31, 2007 because of the closure of the Bay Bridge for construction. Over 101 million passengers rode in FY07, the first time BART has exceeded 100 million trips in a fiscal year.

Second Generation Renovation Program. Since the adoption of the FY06 SRTP/CIP, the District has achieved substantial progress in defining and planning improvements associated with a future Second Generation Renovation Program. The framework of this program was captured in a series of six Board of Directors presentations over the course of calendar year 2006. These presentations focused on major renovation program categories including transit vehicle replacement and the Strategic Maintenance Program as well as other largely unfunded needs such as system security capital, quality enhancements, and capacity modifications. Cumulatively, these presentations identified a 30-year capital need in excess of \$8 billion, with a shortfall conservatively estimated at \$2.6 billion.

Although BART's capital funding challenges are formidable, progress is being made. One of the more significant capital funding successes since the adoption of the FY06 SRTP/CIP was the passage of the California transportation infrastructure bond initiatives, Propositions 1A, 1B and 1C. Passage of these initiatives will provide BART with a formula guarantee of capital funding (currently estimated at \$246 million from Prop 1B) with the ability to compete for other capital improvement and system expansion funds made available through the bond program.

Reinvesting in the System: New Initiatives for FY08. Prior year actions taken by the BART Board of Directors have stabilized BART's financial condition, and thus FY08 presents a limited opportunity for the District to address areas impacted by several years of cutbacks.

Budget initiatives for FY08 were prioritized to address three main emphasis areas from the BART Strategic Plan:

- Focus on the customer experience
- Invest in the people of BART
- Secure the future through system reinvestment

New initiatives for FY08 include adding cleaning staff to improve train and station cleanliness in response to customers' concerns; investing in BART employees through employee development and training programs; and allocating \$27.4 million to capital and partially funding BART's station modernization program with infrastructure bond funding, representing a modest capital reinvestment to secure BART's future.

The District, however, must remain cautious in its financial planning because the economic growth of the past few years is slowing and medical and healthcare costs continue to escalate at a rate that threatens the District's economic well-being. In FY09, for example, retiree medical expenses are projected to increase from \$21 million in FY08 to \$40 million, including two years of "catch up" contributions in addition to the FY09 contribution. The District's strategy is to make funding decisions in a long-term context by using the financial forecasts contained in the document to inform budget decisions. Another key for BART's financial health has been the adoption of the Financial Stability Policy in 2003.

FY08 Budget – Key Issues

Economy—arowth slowing; uncertain financial impacts

Sales Tax & STA funding declines & uncertainty in two important revenue sources

Medical Benefits—rapidly escalating current and future year expenses

Budget Initiatives—balance new programs vs. financial stability

1.2 Changes from Previous SRTP/CIP Documents

The FY08 SRTP/CIP adheres to MTC's new guidelines as described in MTC Resolution No. 3532, Revised. Changes from previous SRTP/CIPs are:

- CIP changes from FY06 to FY08 are:
 - o The time-horizon has increased from 10 years to 25 years.
 - o FY08 CIP System Renovation and Vehicles Reinvestment information is based on 2006 30-year plan.
 - o The 30-year plan 2006 dollars have been escalated by 5% to 2007 dollars.
 - o The last four years of the 30-year plan have been deleted to fit the 25year CIP. The 2006 data has been rolled into the 25-year total.
 - Track Two Projects have been reclassified into asset-based classes consistent with the 2006 30-year Plan and MTC's Transit Capital Inventory Project.
- Appendix C has been renamed from Station Status Report (SSR) to Station Planning, Access, and Transit-Oriented Development Update.

1.3 The SRTP/CIP and Other BART Documents

Annual Operating and Capital Budgets

The FY08 Operating Budget is the basis for the operating and financial outlook for the SRTP's ten-year horizon, and the SRTP includes an analysis of the annual operating budget's revenues and expenses. The adopted

Operating and Capital FY08 Budgets will be posted online at www.bart.gov as soon as they are available.

Strategic Plan

BART's Strategic Plan provides a framework for the decision-making and planning processes that direct the SRTP and CIP as well as the annual budget. The Strategic Plan, first adopted in 1999 and updated in 2003, continues to evolve to meet the changing needs of the District and its riders.

In 2007, BART is celebrating the 50-year anniversary of the legislative adoption of the original BART plan—the blueprint for rail that has since guided the District. This milestone provides an ideal opportunity for the District to consider the vision that will guide it over the next 50 years of service to the Bay Area as part of a Strategic Plan update.

To obtain unique perspectives on the District's future, staff and consultants in January 2007 conducted interviews with individual Board members, union leaders, and staff throughout the District. Their input provided the basis for a Board workshop to discuss and confirm three new Strategic Plan focus areas: Our People, Our Customers, and Our Future. These three areas are refinements of the seven focus areas from the original Strategic Plan, distilled to facilitate understanding and application, and thus be of even greater value to the District.

As part of the Strategic Plan update, the BART Board and staff are now working on BART's vision for the next 50 years in the context of the Regional Rail Plan, which is also being developed to define a rail plan for the broader Bay Area region. BART is currently developing a "Metro" vision that focuses on increasing capacity, metro-like frequency of service, and increased coverage, for example, through infill stations. Once completed, the new BART vision will be incorporated into the Regional Rail Plan, which will provide the foundation for MTC's 2009 Regional Transportation Plan (RTP).

This process will not be finished before the FY08 SRTP/CIP is published. Thus, in order to keep the connection between the Strategic Plan and the SRTP/CIP and to help evaluate the District performance, the FY08 SRTP/CIP has a summary in Section 3.2 of the District's progress in achieving benchmarks for performance measures from the 2003 Strategic Plan. The new Strategic Plan will be fully incorporated in the next SRTP/CIP.

Station Planning, Access, and Transit-Oriented Development

BART staff has been engaged in specific planning activities at several BART stations including station access and transit-oriented development. These activities are described further in *Appendix B*.

Thirty-Year Capital Plans

Given the ridership growth in the late 1990s and in the last few years, the age of the system's infrastructure, and continued pressure to expand the BART system, BART updated its previous 30-year capital planning studies that focus on system reinvestment, system capacity, and long-range expansion planning efforts. The 30-year Plan was updated in 2006 and the results form the basis of this year's CIP for the following program/subprogram areas: System Reinvestment, Vehicles Reinvestment, and Service and Capacity Enhancement.

The System Reinvestment Study culminated in a plan for life-cycle based renovation and replacement of BART's existing capital plant. These life cycle renovation needs will form the basis for the next generation renovation program described in more detail in Chapter 5.

Fleet Management Plan

The BART Fleet Management Plan (FMP) sets out the District's detailed plans for acquisition, maintenance and use of its revenue vehicle fleet through FY25. Updates are provided quarterly to the Federal Transit Administration (FTA).

CHAPTER

Overview of the BART System

Chapter 2 begins with milestones from BART's history and an outline of the District's governance and organizational structures. The chapter goes on to detail the service BART provides and the areas it serves, the fares for this service, and the extensive physical infrastructure that is required to provide it.

2.1 Milestones in BART History

Figure 1 below sets out key milestones in the District's history.

Figure 1 Milestones in BART History

1957	California State Legislature creates BART in response to Bay Area growth and transportation needs
1962	Voters approve \$792 million general obligation bond issue in San Francisco, Alameda, and Contra Costa counties that provides funding to construct original 71-mile system (bond fully paid off in 2000)
1972	BART begins service 12 stations open from MacArthur to Fremont
1973	20 stations open Richmond to Ashby: 6 stations Concord to Rockridge: 6 stations Montgomery Street to Daly City: 8 stations
1974	Transbay service begins
1976	Embarcadero station opens
1995	North Concord/Martinez station opens
1996	Colma and Pittsburg/Bay Point stations open
1997	Castro Valley and Dublin/Pleasanton stations open
2003	Four SFO Extension stations begin service: South San Francisco, San Bruno, SFIA, and Millbrae

- **2007** BART and SamTrans, with the aid of MTC, agree to turn SFO Extension operations over to BART, with monetary contributions from SamTrans and MTC to offset the cost of operating outside the District
 - BART records an all-time ridership high of 389,300 passengers on August 31, 2007
 - FY07 annual ridership hits a record 101.7 million
 - BART celebrates the 50-year anniversary of the legislative adoption of the original BART plan—the blueprint for rail that has since guided the District. This milestone provides an ideal opportunity for the District to consider the vision that will guide it over the next 50 years of service to the Bay Area as part of a Strategic Plan update.

2.2 Governance

Nine publicly elected directors form the District's governing Board. BART is one of three transit systems in the country with an elected board. Members of the BART Board:

- Serve a four-year term
- Represent approximately 352,000 residents in one of nine election districts that comprise the three-county District
- Provide strategic and policy guidance to achieve the District's mission to provide "safe, reliable, customer-friendly and clean regional public transit" to Bay Area residents
- Represent diverse constituencies, taking a leadership role by working with a broad range of stakeholders in the region, state, and nation to promote effective transit policies and political support for regional transit initiatives.

Figure 2 BART Board of Directors

BART Board of Directors	Counties Represented	Term Ends in December
Lynette Sweet, President	Alameda/Contra Costa/San Francisco	2008
Gail Murray, Vice President	Contra Costa	2008
Thomas M. Blalock	Alameda	2010
James Fang	San Francisco	2010
Bob Franklin	Alameda/Contra Costa	2008
Joel Keller	Contra Costa	2010
Zoyd Luce	Alameda/Contra Costa	2008
Tom Radulovich	San Francisco	2008
Carole Ward Allen	Alameda	2010

Organizational Structure 2.3

Figure 3 below details BART's staff, its number one resource:

Figure 3 BART Staff Statistics

Operating and capital employees,	3,336.5
per FY08 Budget	(3,294 full-time, 85 part-time)
The following is a profile of BART emplo	yees as of March 2007:
Gender	74% Male
	26% Female
Age (average)	49 years (age range 18 to 77 years)
Ethnicity*	38.9% white; 23% black; 23.8% Asian or
	Pacific Islander; 13.4% Hispanic; 0.9%
	American Indian
Average length of employment	12.7 years
Average salary (without benefits)	\$71,445
Number of retirees	1,538

^{*} The Federal Transit Administration uses these racial categories and category names

Union Representation

The District has five employee and collective bargaining agreements, representing 87% of the District's workforce, that expire in FY09. Union membership, based upon positions budgeted for FY08, is shown in Figure 4.

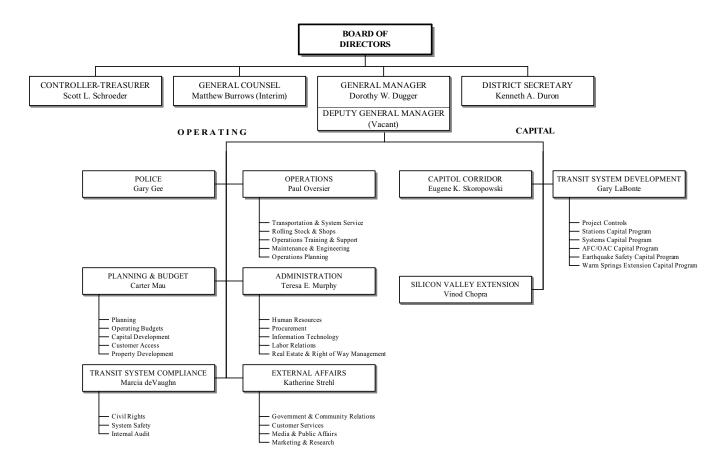
Figure 4 Union Membership

Union	Membership
Service Employees International Union 1021	1,538
Amalgamated Transit Union Local 1555	855
American Federation of State, County and Municipal Employees Local 3993	225
BART Police Officers Association, Local 1008	244
BART Police Managers Association	49

The remainder of BART staff are non-represented.

Figure 5 BART FY08 Organization Chart shows the organizational structure of the District as budgeted for FY08. The District has four Board-appointed positions: General Manager, General Counsel, Controller-Treasurer, and District Secretary. BART is unique among transit districts in that it has its own police department that provides a full range of law enforcement services within the District.

SAN FRANCISCO BAY AREA RAPID TRANSIT FY08 Adopted Budget ORGANIZATION CHART



2.4 Services Provided and Areas Served

Fixed Rail Service

As *Figure 6 BART System Map* on the next page shows, BART operates five lines in Alameda, Contra Costa, San Francisco, and San Mateo counties. The current lines and hours of service are given in *Figure 7* below:

Figure 7 BART Routes and Hours of Service

	Hours of Service		
Route	Weekday	Saturday	Sunday
Pittsburg/Bay Point—Daly City	4 am-12 am	6 am-12 am	8 am-12 am
Dublin/Pleasanton— SFO/Millbrae	11	"	11
Richmond—Fremont	**	**	"
Richmond—Daly City ¹	5 am-7 pm	9 am-6 pm	Not in service
Fremont—Daly City ²	**	"	"

¹ End of line station: Peak—Colma, Non-peak—Daly City When route is not in service, passengers can take the Richmond—Fremont line and transfer at MacArthur to reach any destination.

The system's headways, or times between trains, are as follows:

Figure 8 BART Headways

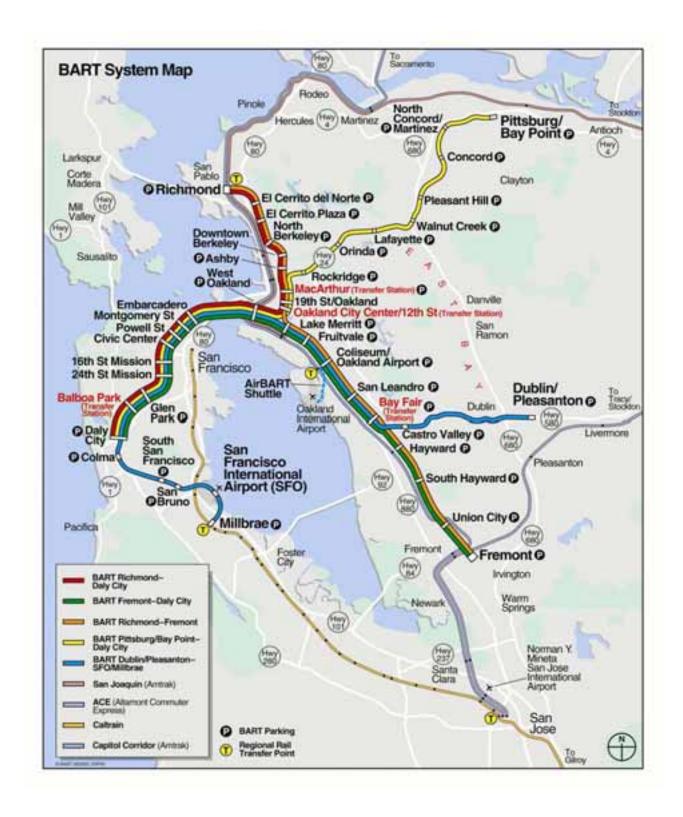
	Headway (minutes)
Monday through Friday ¹	Day: 15
	Night: 20
Saturday, Sunday and major	20
holidays	

¹ For the Pittsburg/Bay Point—Daly City line, peak period (6 a.m. to 9 a.m. and 4 p.m. to 7 p.m.) headways are 5 or 10 minutes

Depending on demand, holiday rail service is operated on a full or modified weekday schedule, or a Saturday or Sunday schedule. BART service is also coordinated with major Bay Area events. Additional rail service for special events is provided by either lengthening regularly scheduled trains, placing additional trains in service, or providing revenue operations at times when the system is normally closed (e.g., early Sunday morning opening for the annual Bay-to-Breakers footrace in San Francisco).

² When route is not in service, passengers can take the Richmond—Fremont line and transfer at either Bay Fair or MacArthur station to reach any destination.

Figure 6 BART System Map



BART periodically reviews and adjusts service levels, if necessary, to meet varying levels of ridership demand. Changes include lengthening or shortening trains, adding or removing trains scheduled on a route, or even changing a route's service hours or terminal stations.

Effective January 2008, BART will improve Monday-through-Saturday evening and all-day Sunday service headways from 20 minutes to 15 minutes. Also in January 2008, BART will re-route the Pittsburg/Bay Point line down to the SFIA Station and the Richmond line to the Millbrae Station, improving service by providing two-route service to three of the five SFO Extension stations and reducing the travel time between Millbrae Station and the rest of the system.

The number of vehicles currently required to provide BART's revenue service is 529 cars.

Accommodation of Bicycles

Bikes are allowed on all trains and at all times except where highlighted as restricted in the *BART Fares and Schedules* brochure. Folding bikes, however, are always allowed. Bikes are permitted in any car of the train except the first car. Bicyclists are to avoid crowded cars and only board cars that can comfortably accommodate them and their bicycles and must yield priority seating to seniors and people with disabilities, yield to other passengers, and not block aisles or doors.

Demand Responsive Service

BART complies with the Americans with Disabilities Act (ADA) requirement to provide paratransit service comparable and complementary to the BART system. Federal regulations define the ADA paratransit service area as a 0.75-mile radius around each BART station.

Paratransit service is available to persons who are certified as unable to access and ride BART because of their disability, and BART participates in a regional ADA eligibility process followed by the principal transit operators in the San Francisco Bay Area. BART, together with other Bay Area transit agencies, works to coordinate regional paratransit travel through the Partnership Transit Coordinating Committee and its Accessibility Committee.

Paratransit Partnerships with Other Operators

To provide effective paratransit service in its service area, BART partners with other transit operators.

AC Transit: In their areas of joint service, BART and AC Transit fund and administer the East Bay Paratransit Consortium (EBPC). Service is provided through contractors. BART assumes 31% and AC Transit 69% of the costs based on their proportionate areas of responsibility.

Muni: BART has a Memorandum of Understanding (MOU) with the San Francisco Municipal Railway (Muni) whereby Muni provides service to meet BART's obligation and BART reimburses Muni for 8.8% of the net cost of paratransit service to all San Francisco riders.

Other Agencies: BART has financial agreements with Contra Costa County Transit Authority (County Connection), Eastern Contra Costa Transit Authority (TriDelta), and Livermore Amador Valley Transit Authority (Wheels). These agencies provide paratransit service on BART's behalf at the same time as they provide for their own paratransit service obligation. BART's share of the service these operators provide is small compared to that provided by East Bay Paratransit Consortium and Muni.

BART plans no changes in paratransit service provision in FY08. The efforts of BART and partner operators will focus on providing all ride requests to eligible recipients while at the same time controlling costs.

Connecting Service Provided by Other Operators

Bay Area bus operators provide connecting (or "feeder") service to BART. These operators are AC Transit, County Connection, Dumbarton Express (operated by AC Transit), Muni (City and County of San Francisco), SamTrans, Santa Clara Valley Transportation Authority (VTA), Tri Delta Transit, Union City Transit, WestCAT, Wheels, and City of Benicia.

BART contributes about \$14 million annually for feeder services provided by AC Transit and Muni as well as four smaller East Bay operators, County Connection, Tri Delta Transit, WestCAT, and Wheels. Most of the funding is paid directly to the operators by MTC out of BART's STA revenue, and the rest comes out of BART's operating budget.

Lifeline Service

In an analysis conducted in 2001, BART found that 33 of its then-39 stations were in neighborhoods of concern as described by MTC through its Lifeline program. BART has been actively involved in both planning and implementing Lifeline principles, as described below:

- In the 2001 update to its Strategic Plan, BART adopted a Welfare to Work to Career policy which outlined goals and strategies for supporting enhanced mobility and career advancement for welfare to work clients and other low income residents of the Bay Area.
- In 2001, BART was awarded a Caltrans' Environmental Justice grant to work with community-based groups and residents on removing barriers to accessing the local BART station. This grant focused on three BART stations Richmond, Lake Merritt and Embarcadero and resulted in clear project recommendations.

Of the recommended projects that were within BART's control, many have been implemented. For example, a major barrier to local employees' use of the Richmond BART station was the safety concern of those walking along the Nevin Walkway. As part of the Richmond Transit Village project, the walkway has been redesigned so that it is no longer below grade, and BART has supported the City's efforts to obtain grants to provide new landscaping and lighting along the portion of the walkway (not on BART property) that connects the station to the westside businesses and neighborhoods.

- BART was also successful in 2004 in obtaining a Caltrans' community-based planning grant to conduct station area plans at three BART stations that lie within communities of concern (as defined by MTC): Daly City, South Hayward and Lake Merritt. These planning efforts again involved local community-based groups and residents, through charrettes, focus groups and surveys, in identifying access barriers and recommending solutions for removing these barriers. Since the plan's completion in 2006, BART has worked closely with local transportation and agency partners to implement many of the identified solutions, such as providing additional wayfinding signage in Oakland.
- Through community-based station area planning efforts, BART staff works to identify the priority barriers at each station, and then seeks funding to implement these projects either funded by BART, through grants or in partnership with cities, counties and the private sector.
- BART works in partnership with MTC and other transit operators to improve connecting services to its stations. For example, BART funds bus feeder services to many of its stations, providing connections to both regional and local transit services. BART also supports local transit operators in their quest for additional operating funds for connecting services, such as supporting County Connection's grant proposal for shuttle service in the Monument Corridor neighborhood of Concord.
- BART has worked with MTC and local operators to implement the late night owl network available at core BART stations.
- BART uses the opportunities presented by transit-oriented development (TOD) to improve access to its stations for all residents and users and to reinvigorate local communities. Because TODs incorporate a variety of land uses and services, TODs can help simplify trip-making for low-income individuals and families. In addition, BART staff encourages local agencies and developers to incorporate affordable housing and services that may directly benefit low-income residents, such as child care centers, into TOD projects.
- BART has worked closely with MTC and other agencies on the Community-Based Transportation Plans (CBTPs) in areas closest to BART stations including West Oakland, South Berkeley, West Berkeley, North Richmond, Bay Point and

the Ashland neighborhood in Alameda County. BART is currently involved in developing the Central and East Oakland CBTP. MTC's CBTPs are generally targeted to low-income areas where there are gaps in the provision of transportation services. Improved access (including bus, bicycle and pedestrian) to the nearest BART station is often a key finding of the CBTPs and these findings are incorporated into BART's future planning at those stations. For example, the Bay Point CBTP recommended additional bicycle lockers at the Pittsburg/Bay Point station, and BART staff has included this recommendation in its grant applications for regional bicycle funds.

2.5 Fares

Fixed Rail Fares

BART fares are computed using a distance-based formula with surcharges applied. Fare structure components and fare media, including discounted tickets and transfers, are shown in *Figure 9. Figure 10* details station-to-station fares for BART's 43 stations.

Effective January 1, 2008, the following fare change will be implemented:

- Fares will increase on average by 5.4%, in accordance with the Board-approved productivity-adjusted CPI-based fare increase program.
 - The SFIA Premium Fare will remain at \$1.50 because it generates sufficient revenue to meet repayment obligations for the SFO Extension capital reserve account.

Demand Responsive Fares

The ADA limits the fare that can be charged for ADA paratransit service to twice the full adult fare for a comparable fixed route trip.

Fares for paratransit services in which BART participates vary widely, due to the range of fare structures of BART and local bus agencies:

- BART/AC Transit EBPC fares are distance-based and range from \$3.00 for trips less than eight miles to a maximum of \$7.00 for very long trips.
- Muni paratransit provides for travel within San Francisco.
 - $\circ~$ Taxi vouchers cost riders slightly more than 13% of the meter rate
 - $\circ~$ Lift service for wheel chair and ambulatory users is \$1.65 per ride
- Fares of BART's other paratransit partners currently vary from \$2.00 to \$3.50 per trip.

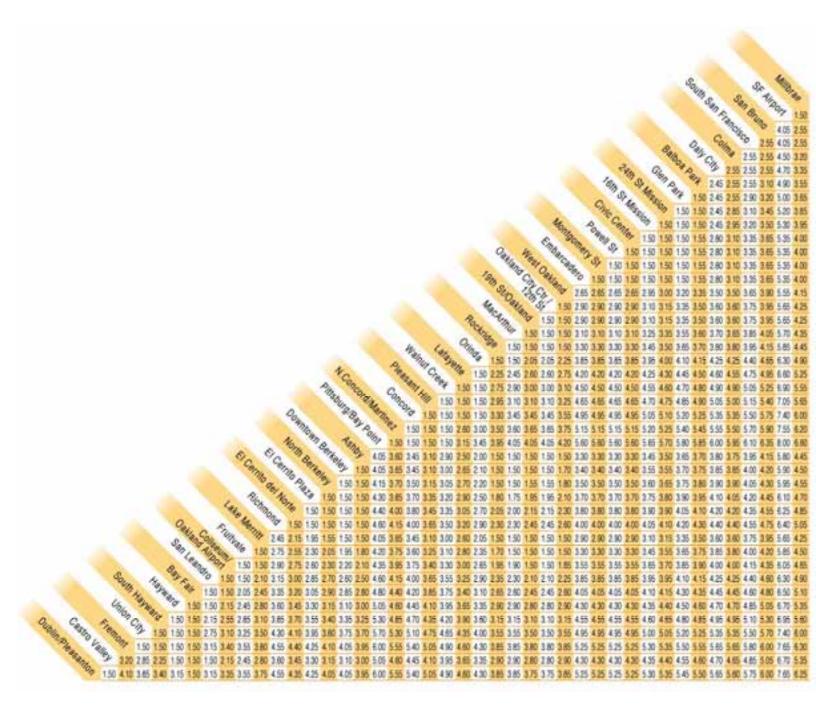
Figure 9 BART Fare Components and Ticket Prices as of January 1, 2008

TRIP LENGTH	Minimum Fare: Up to 6 miles	\$1.50	
	Between 6 and 14 miles ¹	\$1.70 + 12.4¢/mile	
	Over 14 miles	\$2.69 + 7.5¢/mile	
SURCHARGES	Transbay	\$0.83	
	Daly City ²	\$0.96	
	San Mateo County ³	\$1.20	
	Capital ⁴	\$0.11	
	Premium fare applied to trips to/from SFIA	\$1.50	
SPEED DIFFERENTIAL	Charge differential for faster or slower than average trips, based on scheduled travel time	±4.7¢/minute	
RESULTING FARES	Range ⁵	\$1.50 to \$8.00	
	Average fare (before discounts) 6	\$2.97	
	Average fare paid (after discounts) 6	\$2.77	
RAIL FARE	Children under 5	Free	
DISCOUNTS & SPECIAL FARES ⁷	62.5% Discount: Children 5 through 12 Persons 65 and over Persons with a qualifying disability	\$9 (\$24 ticket value)	
	Students 13 through 18: 50% discount 8 Regular adult: 6.25% discount	\$16 (\$32 ticket value) \$45 & \$60 (\$48 & \$64 ticket value)	
	Excursion (entry/exit, same station) 9	\$4.90	
SEMI-MONTHLY RAIL/BUS PASS	BARTPlus (w/ \$15 to \$50 BART value) 10 (6.25% discount, last ride bonus)	\$38 to \$71 (8 denominations)	
MONTHLY RAIL/ MUNI PASS ¹¹	· · · · · · · · · · · · · · · · · · ·		
ONE-WAY TRANSFERS: FROM BART TO ¹² (issued at rail stations)	The County Connection Tri-Delta Transit Union City Transit VTA WestCAT Wheels	\$0.85 (\$1.75 base fare) \$0.75 (\$1.25 base fare) \$0.50 (\$1.50 base fare) Fare reduction equal to local credit \$1.00 (\$1.50 base fare) \$0.60 (\$1.50 base fare)	
TWO-WAY TRANSFERS: FROM BART/ TO BART ¹²	AC Transit SF Muni, within San Francisco SF Muni, Daly City Station	\$1.50 (\$1.75 base fare) \$1.25 (\$1.50 base fare) Free (\$1.50 base fare)	
ADA SERVICE	East Bay Paratransit Consortium ¹³ All other areas	\$3.00 to \$7.00 See ADA Paratransit Section	

NOTES: BART FARE COMPONENTS AND TICKET PRICES -

- 1. Trips over 6 miles within East Bay Suburban Zone (certain station pairs between Pittsburg/Bay Point and Orinda, Fremont-Bay Fair, Richmond-Ashby and Dublin/Pleasanton-Bay Fair) are priced at the fare indicated for trips under 6 miles.
- 2. The Daly City surcharge is applied to trips between Daly City station and San Francisco stations; it does not apply to Transbay trips or San Mateo County surcharge trips.
- 3. The capital surcharge is applied to trips that begin and end in the 3-county BART District including Daly City; the Board approved this surcharge in May 2005 to be used to fund capital projects within the 3-county BART District including Daly City.
- 4. The San Mateo County surcharge is applied to trips between San Mateo County stations (except trips between SFIA station and Millbrae station for which only the Premium Fare is charged) and trips between San Mateo County stations (except Daly City) and San Francisco stations; it does not apply to Transbay trips.
- 5. Fares effective January 1, 2008. BART rail fares are computed by automatic fare collection equipment and are rounded to the nearest 5¢. The range of fares is based on the adopted fare resolution for the fare increase effective January 1, 2008. Prior fare increases occurred on January 1 of 2006, 2004, and 2003; April 1 of 1997, 1996, and 1995; January 1, 1986, September 8, 1982, June 30, 1980 and November 3, 1975.
- 6. The average rail fare before and after discounts includes rail passenger revenue from all fare instruments. The figures shown are based on FY07 actual data through June 2007.
- 7. Discounted tickets are sold at outside retail and community outlets through BART's Tickets-To-Go program. Retail and contractor operated in-station sales booths sell discounted tickets at Civic Center, Colma, Embarcadero, Montgomery, Powell, and Walnut Creek BART stations. BART's Customer Service Center at Lake Merritt sells all ticket types and processes Tickets by Mail orders.
- 8. Tickets include a last ride bonus.
- 9. There is a three-hour limit on the excursion fare.
- 10. The BART Plus ticket became available on April 1, 1991 and is good for one-half month beginning either on the first day or 16th day of the month. It has a stored value like an adult BART blue ticket that allows travel on BART up to the amount of the stored value during the valid one-half month period. In addition, patrons may use the BART Plus ticket as a flash pass for unlimited rides on the following bus operators during the valid one-half month period: Benicia Breeze, The County Connection, Dumbarton Express, Muni (City and County of San Francisco), SamTrans, Santa Clara Valley Transportation Authority (VTA), Tri Delta Transit, Union City Transit, WestCAT, and Wheels.
- 11. BART began accepting the regular adult Muni Fast Pass for BART travel within San Francisco on April 1, 1983 (discounted Fast Passes are not valid on BART). The BART/Muni Fast Pass allows unlimited rides on Muni and BART within San Francisco. The price of the monthly Fast Pass is currently \$45. Muni reimburses BART \$0.97 (effective January 1, 2006) for each Fast Pass trip on BART. Muni Fast Passes are sold at stores, places of employment and other outlets in San Francisco.
- 12. One-way and two-way transfers are issued free of charge from vending machines located inside the paid area of BART rail stations. Additional fares, if required, are paid upon boarding the connecting carrier. This additional fare is shown in the right-hand column. The prices shown in parentheses correspond to the connecting carrier's base fare (the full adult price when not using a transfer). The fare savings with the transfer are equal to the base fare less the additional fare paid to the connecting transit system.
- 13. BART and AC Transit have formed the East Bay Paratransit Consortium (EBPC) which provides service to eligible BART customers in service areas that overlap with AC Transit.

Figure 10 BART Station-to-Station Fare Table Effective January 1, 2008



2.6 Physical Infrastructure

Revenue Fleet: Rail Cars

BART has a fleet of 669 cars that consists of A-, B-, and C-rail cars, each with 68 seats available, with the exception of C1 cars, which have 64 seats. *Figure 11* summarizes BART's rail vehicles. BART will soon modify C2 car interiors by removing some windscreens and seats in order to facilitate passenger flow into and out of cars and increase space for wheelchairs, bikes, and other items.

Train length: Three cars minimum, per California Public Utilities Commission requirement, to ten cars maximum based on station platform lengths. Lead cars are either an A- or C-car.

Train control: Computers along the right-of-way automatically control train movements, as supervised by the train control computer at the Operations Control Center; train operators can override the automatic system if needed.

Train speed: Revenue service is based on a maximum speed of 70 miles per hour and an average speed of 34 miles per hour, including station stops.

Car Type	Number in Fleet	Function	Date Manufactured	Date Renovated	Size (feet)
A2	59	Lead or trail			75x10.5
		car	1971 to 1975	1995 to 2002	
B2	380	Mid-train car	17/11017/3	1773 10 2002	
		only			
C1	150	Lead, mid-	1987 to 1990		70x10.5
C2	80	train, or trail	1995 to 1996	N/A	
		car			

Figure 11 BART Rail Vehicle Inventory

2.7 Existing Facilities

Administration/Operations Control Center

Most of the District's administrative staff is located in downtown Oakland at 300 Lakeside Drive. The Operations Control Center (OCC) houses BART's central train control computer system that supervises train movements 24 hours a day. OCC train controllers and other BART certified personnel monitor train movements and can override the automatic system if needed. A telephone system connects the OCC to station agents, and each station also has radios for direct contact to the OCC in the event of emergencies, delays, problems or other events. In addition, OCC

personnel can monitor train movements and activities in and around stations via remote cameras located at key points.

Maintenance: Yards and Shops

Planned preventive and unscheduled maintenance are performed at four facilities located at or near these stations:

- Concord
- Hayward
- Richmond
- Daly City

Accident damage, component, and heavy repairs are also done at the Hayward Shop. Wayside maintenance is housed at the Oakland Shops, a fifth maintenance facility located between Lake Merritt and Fruitvale stations.

A Strategic Maintenance Program (SMP) is being introduced in the Rolling Stock & Shops department. Essentially, SMP is a proactive maintenance operation aimed at continuous improvement through strategically engineered, planned and scheduled maintenance and overhaul activities. Maintenance activity is driven by detailed engineering analysis of systems and components and conducted using lean manufacturing principles, supported by a procurement and parts distribution system predicated on quality and just in time delivery.

A highly productive secondary repair shop capable of supplying reliable vehicle components is the cornerstone of a successful vehicle maintenance program. Therefore, Secondary Repair has been identified as the start point for SMP. During FY07 the Electromechanical Shop underwent an SMP conversion. As a result, productivity in this shop has increased by 20% and the number of cars awaiting parts has decreased by 30%.

The objective for FY08 is conversion of the Electronic and Truck Shops and initiation of SMP in the primary shops. All shops are expected to be SMP operational during the first quarter of FY10.

Additionally, a major revamp of the procurement and contract process is underway. The objective is to ensure that reliable parts are delivered on time, to the location needed. Following are the objectives of this component:

- Establish clear, easy contracting process make quality a key component of bid evaluations; detail recourse to disqualify suppliers
- Develop and implement supplier pre-qualification program
- Develop just-in-time delivery to all shops for majority of scheduled items
- Decrease BART part truck runs by 50%
- Kit and stage parts (by suppliers when possible) at workstations

- Redesign warehouse and store processes and layout to ensure accuracy and optimized stock levels
- Organize supply chain for "pull" re-stock/supply

Vehicle Storage and Staging

BART's current system is configured toward five lines of service frequencies. These service patterns are supported by four major yards, three of which are primary 24 hour servicing locations.

The four major yards are Concord Yard with 163 revenue vehicles currently assigned, Hayward Yard with 196 vehicles assigned, Richmond Yard with 122 vehicles assigned and Daly City with 82 vehicles assigned.

Incidental overnight vehicle storage takes place at the terminal end points of Millbrae, Pittsburg/Bay Point, and Dublin.

Figure 12 Parking at BART Stations

	Parking	
BART Station	Spaces	
Pleasant Hill (a)	3,060	
Dublin/Pleasanton (b)	3,047	
Millbrae	2,981	
Concord	2,345	
Colma (c)	2,236	
El Cerrito del Norte	2,180	
Fremont	2,142	
Walnut Creek	2,096	
Daly City	2,047	
Pittsburg/Bay Point	2,036	
North Concord/Martinez	1,977	
Bay Fair	1,669	
Lafayette	1,529	
Hayward	1,467	
Orinda	1,442	
South San Francisco	1,371	
San Leandro	1,270	
South Hayward	1,253	
Union City	1,155	
Castro Valley	1,118	
San Bruno Coliseum/Airport	1,072	
Fruitvale	978 871	
Rockridge	869	
North Berkeley	797	
El Cerrito Plaza	749	
MacArthur	618	
Ashby	606	
Richmond	605	
West Oakland	445	
Lake Merritt	219	
Glen Park	53	
12th Street	0	
19th Street	0	
16th Street/Mission	0	
24th Street/Mission	0	
Balboa Park	0	
Civic Center	0	
Downtown Berkeley	0	
Embarcadero	0	
Montgomery Street	0	
Powell Street	0	
San Francisco Intl Airport		
TOTAL	46,303	

Park-and-Ride

BART has a total of about 46,000 parking spaces at 32 of its 43 stations as shown in *Figure 12.* Most of these parking spaces are in surface lots, but BART does have 11 parking structures. In addition, there are about 500 spaces for motorcycle parking at 30 stations.

Paid parking is one of the larger non-fare revenue sources. BART offers the following paid parking programs: Monthly and single-day reserved parking; daily fee parking; and airport/long-term permit parking.

- (a) Pleasant Hill includes 581 temporary spaces for I-680/24 construction mitigation measure.
- (b) BART & Alameda County added 427 temporary spaces until construction of a BART parking garage & transit village at the station is complete.
- (c) Colma Station includes 1,074 spaces in the SamTrans surface parking lot.

Stations and Access

Stations

BART has 43 stations: 16 subway, 14 elevated, and 13 at grade.

- Platform length is about 700 feet to fit the maximum train length of ten cars
- Stations are spaced on average between one-half to one mile apart within and near San Francisco, Oakland and Berkeley downtown areas and two to ten miles apart in suburban areas
- AFC equipment accepts cash, credit cards and debit cards, vending and processing passenger tickets
- Rider information is provided through:
 - o Platform-level automated train destination signs that show an arriving train's destination and other information
 - o Platform and concourse-level special displays provide train schedules, local area destinations, connecting transit, and other information
 - o A public address system linked to BART's OCC gives additional passenger information; station agents also use it to make in-station announcements

Access

Access within BART stations is provided by stairways, elevators and escalators that link with various connecting local transit, pedestrian, bicycle pathways and parking areas at the station street level.

Station access facilities at the street level can include dedicated bus lanes and berths, bus stop shelters, passenger drop-off zones, transit information centers, regional transit ticket outlets, transfer dispensers, signed access routes for pedestrians and bicycles, bicycle racks and lockers, and parking. Bicycles are also allowed on trains, except for those periods that are "blacked out" on the schedule.

BART coordinates with local transit providers and shuttle operators to provide access to its stations. Seventeen percent of patrons traveling on weekdays from home to BART use public transit to access BART stations, and BART financially assists the local transit operators via feeder service payments in return for this service. There are at least 18 privately operated shuttles that serve BART stations. The AirBART shuttle, which serves the Oakland Airport and is operated by BART in partnership with the Oakland Airport, carries an average of 108,000 riders a month.

Three companies (City Car Share, Flex Car, and Zip Car) provide car sharing services at one or more of ten BART stations (Daly City, Balboa Park, Glen Park, West Oakland, Lake Merritt, MacArthur, Rockridge, Ashby, North Berkeley and El Cerrito Plaza). Patrons arriving a BART station can rent a car share vehicle to travel to and return from their final destination.

Track and Right-of-Way

BART is powered by an electric third rail at 1,000 volts DC.

Rail revenue track: 104 miles of continuously welded, double-mainline, 66-inch gauge track.

Rail right-of-way: Fully protected with no grade crossings.

Rail inspection and maintenance: Tracks are routinely inspected and maintained to insure structural integrity and smooth operating surfaces, including use of special track geometric and rail flaw detection vehicles. Track maintenance is performed during non-revenue hours.

Bicycle Facilities

BART's bicycle facilities consist of bike stations, lockers, and bicycle racks.

Bike Stations

BART provides free secure bike parking in bike stations at three BART stations:

Downtown Berkeley: Located on the concourse level, attendants store bikes in a secure area that accommodates 105 bikes.

Embarcadero: Located on the concourse level, this facility has parking for 120 bikes and is operated by the non-profit organization Bikestation®. Attended parking is available during the morning and evening weekday rush hours (7:30 am—9:30 am and 3 pm—7 pm). However, for those whose schedule varies from posted hours, they can become members of a plan that provides them with a tag to access the bike station during service hours.

Fruitvale: The Fruitvale bike station is in Fruitvale Village, adjacent to the Fruitvale station in Oakland. Operated by local retailer Alameda Bicycle, the Fruitvale bike stations is the second largest in the nation and features free secure bike storage with 236 spaces and a full-service bike repair shop.

Lockers

BART provides about 1,000 lockers at 34 stations for storing bicycles, mopeds, or wheelchairs.

In addition, BART plans to install about 200 electronic bicycle lockers by fall 2007 to meet high demand for secure bike parking. The project will increase the bicycle storage capacity at BART stations, reducing or eliminating the wait list for lockers, demonstrate the effectiveness of the new electronic locker technology, and reduce the fire hazard created by the existing plastic lockers. Ultimately, the project will increase the opportunity to access BART by bicycle, thereby promoting the reduction of drive-alone trips to BART.

For fall 2007, electronic lockers are slated for installation at nine stations: Ashby, Bayfair, Dublin/Pleasanton, Lake Merritt, MacArthur, North Berkeley, Rockridge, San Leandro, and West Oakland. By 2008, electronic lockers are scheduled to be installed at three more stations, Balboa Park, Glen Park, and Walnut Creek.

Bicycle Racks

BART has bicycle racks at 37 stations that can accommodate about 2,800 bicycles. Additionally, many of BART's underground urban stations have racks near station entrances that are maintained by the local jurisdiction and not included in this count. To meet bicycle parking demand at stations with little or no secure bicycle parking due to space limitations BART has added bicycle racks inside the secure concourse areas at nine stations, which can accommodate 264 bicycles.

System Evaluation

Chapter 3 describes how BART establishes, updates and applies goals, performance measures, and benchmarks to evaluate its performance, including ridership, a key measure of the District's success. A major resource for the District's evaluation is BART's Strategic Plan, which is in keeping with the recommendation in MTC's Triennial Performance Audit, conducted in FY05, to more closely align the SRTP with the Strategic Plan.

BART's Strategic Plan: Establishing Goals, Performance 3.1 Measures, and Benchmarks

BART's mission to deliver safe, reliable, customer-oriented transportation has remained the same throughout its 50-year history, and BART's Strategic Plan incorporates this mission.

Although BART's mission continues unchanged, the BART Strategic Plan has evolved over time, as follows:

1999

- Board adopted Strategic Plan with seven focus areas, each with goals:
 - The BART Customer Experience, Building Partnerships for Support, Transit Travel Demand, Land Use and Quality of Life, People of BART, Physical Infrastructure, and Financial Health.
- Strategic Plan developed from extensive data analysis, assessment of past trends and future projections, and considerable input from BART's stakeholders, including employees and transit customers.

2003

Board renewed District commitment to strategic planning by adopting an updated Plan that emphasized implementation.

2004-2005

District produced Strategic Plan Status Reports with focus area performance measures and benchmarks, which track achievements and areas that require improvement.

2006

• To meet BART's new challenges and opportunities, staff initiated a Strategic Plan updating process with the BART Board that included a series of "strategic discussions" with the Board about Regional Rail,

Access, the 30 Year Capital Plan, and Transit-Oriented Development.

2007

- BART celebrates the 50-year anniversary of the legislative adoption of the original BART plan—the blueprint for rail that has since guided the District. This milestone provides an ideal opportunity for the District to consider the vision that will guide it over the next 50 years of service to the Bay Area as part of a Strategic Plan update.
- In January 2007, staff and consultants conducted interviews with individual Board members, union leaders and staff throughout the District to obtain unique perspectives on the District's future.
- These stakeholder interviews provided the basis for a Board workshop to discuss and confirm three proposed Strategic Plan focus areas: Our People, Our Customers, and Our Future. These three areas are refinements of the seven focus areas from the original Strategic Plan, distilled to facilitate understanding and application, and thus be of even greater value to the District.
- During summer and fall 2007, as part of the Strategic Plan update, the BART Board and staff will be working on BART's vision for the next 50 years in the context of the Regional Rail Plan, which is also currently being developed.
 - o The Regional Rail Plan, led by BART, MTC and Caltrain, seeks to define a rail plan for the broader Bay Area region with respect to both passenger and freight rail.
 - BART is currently developing a "Metro" vision that focuses on increasing capacity, metro-like frequency of service, and increased coverage, for example, through infill stations.
- Once completed, the new BART vision will be incorporated into the Regional Rail Plan which will provide the foundation for MTC's 2009 Regional Transportation Plan (RTP).

The Strategic Plan update will not be finished before publication of the FY08 SRTP/CIP. Thus, to keep the connection between the Strategic Plan and the SRTP/CIP and help evaluate the District performance, the FY08 SRTP/CIP includes a summary in Section 3.2 of the District's progress in achieving benchmarks for performance measures from the 2003 Strategic Plan. The updated Strategic Plan will be fully incorporated in the next SRTP/CIP.

The 2003 Strategic Plan also includes strategic initiatives—both policies and programs—that have multiple links to the seven focus areas and provide

definitive implementation strategies. For the SRTP/CIP, two policies are most relevant, System Expansion and Financial Stability. The System Expansion Policy involves enhancing regional mobility and generating new ridership on a cost-effective basis in partnership with the communities served. The Financial Stability Policy is designed to ensure long-term operating and capital financial stability.

The District has another important assessment tool, the biennial Customer Satisfaction Survey, and a number of performance measures are taken from this survey.

3.2 Performance Measures and Benchmarks: Review and **Application**

In its Strategic Plan, BART sets high standards for systemwide performance. Performance achievement is measured with benchmark data. This highlights for the District which areas are having success and which require more attention.

For the near-term, every three months through the District's Quarterly Performance Reports, the Board and staff can evaluate the status of certain performance measures, along with other service measures. Those quarterly performance indicators that are sufficiently broad in scope are also used to measure achievement of a Strategic Plan focus area's goals. In addition, the Board is kept apprised quarterly of the District's financial situation through Quarterly Financial Reports, which include two key performance measures from the Financial Health focus area. Thus, the Strategic Plan is supported by both near-term and long-term measurement and evaluation processes.

The District also sets its benchmarks, or standards, both in the near-term and long-term. In the near term, the quarterly reports on service and the budget permit adjusting a benchmark in a timely way to address any concern. For example, for service reliability (as shown by mean time between service delays) between FY04 and FY05 the District increased the standard by 100 hours to 1800 hours. This continues the trend toward creating a more rigorous standard: over the last five years, the standard has increased by 38%. For long-term evaluation purposes, many Strategic Plan Status Report benchmarks include both the current standard and the standard the District is working toward. For example, by 2010 the Transit Travel Demand performance measure benchmark for off-peak ridership is slated to increase from the current 44% of total ridership to 46%.

Each of the seven Strategic Plan focus areas contributes to overall system success. Of particular relevance to the FY08 SRTP/CIP, however, are the

focus areas of The BART Customer Experience, Transit Travel Demand, Physical Infrastructure, and Financial Health; *Appendix C* contains benchmark achievement status for FY05 and FY07, with an evaluation column showing whether the benchmark is met or exceeded, merits watching, or is unmet. Figure 13 below summarizes Appendix C's findings. Performance measures and benchmarks from these areas are also referenced in Chapter 4, Operating Service Plan and Financial Plan.

For the next SRTP/CIP, the three refined Strategic Plan focus areas—Our People, Our Customers, and Our Future—which the Board, union leaders and staff throughout the District distilled from the original seven focus areas as the most important, will provide the guiding framework for evaluation.

Figure 13 BART Performance Measure & Benchmark Summary

Focus Area	Performance Measure Achievements	Performance Measure Merits Watching
The BART Customer Experience	85% of BART's customers surveyed in 2006 reported their overall satisfaction with BART as very or somewhat satisfied. This is almost identical to 86% in 2004, although 3% of respondents did shift from "very satisfied" to "somewhat satisfied."	The District continues to work to increase the transit access mode share to BART that, based on the latest data available, is 20.5% compared to the 21.5% benchmark to be achieved by FY05.
Transit Travel Demand	BART is a lead agency with MTC and Caltrain in developing the Regional Rail Plan, which has objectives that include integrating passenger rail systems and improving interfaces with connecting services.	Weekday off-peak ridership falls just short of the benchmark at 43% of the total share of ridership compared to the desired 44%. System utilization (passenger miles/revenue seat miles), however, at 32% is still beneath the benchmark of 35%.

Physical Infrastructure	BART's equipment continues to perform above benchmark. In addition, vehicle reliability continues to more than meet expectations, with a mean time between service delays of 2942 hours, compared to a benchmark of 1800 hours.	Train cleanliness is a customer concern and does not meet the benchmark; in FY08, BART will be funding additional car cleaners to address this issue. Substantially more investment in renovation is required: the benchmark is \$2.3B, while \$1.1B is programmed.
Financial Health	BART's operating ratio of 67% more than meets the benchmark of 60% or higher; the increase in operating costs continues to track below inflation; and BART's credit rating is even higher than in FY05.	BART's reserve available for economic uncertainty valued at \$15.8M for FY07, or 3% of total annual operating expenses, continues to be below the benchmark of 5% of total annual operating expenses.

3.3 Evaluating Ridership

A key measure of BART's transportation service is how many riders it carries. BART recorded an all-time ridership high for daily service of 389,300 passengers on August 31, 2007 and for the fiscal year 2007, an all-time high of 101.7 million trips.

Ridership is tracked and fares deducted as passengers process their tickets when exiting BART fare gates. Upon this transaction, the stations of entry and exit, the exit time, fare deducted, and type of ticket used are recorded by BART's Data Acquisition System (DAS). After each revenue day, the DAS data are processed into electronic files for tabulation and monitoring.

All ridership figures reported in this document are linked trips. A linked trip is defined as one passenger equals one trip, regardless of whether the person transferred to another BART route to complete his or her trip. For some federal and local regulatory agencies, BART must report unlinked trips, which equal the number of boardings the rider makes. For example, a person traveling between stations in Walnut Creek and downtown Berkeley would board at Walnut Creek and have to transfer to another train at MacArthur station to reach Berkeley. These two train boardings made by the one rider would be counted as two unlinked trips or one linked trip.

Figure 14 BART Rail Ridership shows average weekday, Saturday, Sunday, and total annual linked trips for the past ten fiscal years. During that time,

new stations opened and the economy surged, faltered and stabilized. BART's ridership is often directly impacted by the health of the economy.

Figure 14 BART Rail Ridership

_		Average Trips		Total Annual
_	Weekday	Saturday	Sunday	Trips (millions)
FY07	339,359	172,040	124,874	101.7
FY06	322,965	161,884	116,479	96.9
FY05	310,717	150,046	108,721	92.8
FY04	306,570	145,394	104,350	91.0
FY03	295,158	137,362	100,848	87.4
FY02	310,725	137,108	96,024	90.8
FY01	331,586	144,831	103,949	97.3
FY00	310,268	132,372	91,162	91.1
FY99	278,683	118,452	80,299	81.4
FY98	265,324	110,778	74,042	75.7

Weekday Ridership:

- Increased 27.9% between FY98 and FY07
 - o As the economy expanded at a record rate from the late 1990s through FY01, ridership substantially increased
 - o With the economic slowdown that began mid-way through FY01, BART ridership declined
 - o This trend continued until the opening of the SFO Extension and economic stabilization in FY04
- Grew by 10.7% between FY04, the first year of SFO Extension operations, and FY07

Weekend Ridership:

- Saturday trips grew 55.3% and Sunday trips 68.7% between FY98 and **FY07**
- Saturday and Sunday trips grew 18.3% and 19.7% respectively between FY04, the first year of SFO Extension operations, and FY07
- Reasons for more rapid growth on weekends compared to the weekday could include
 - o More available capacity, both on trains and in accessing the stations
 - Unpredictable and growing weekend auto congestion
 - o More events and venues, such as AT&T Park
 - o SFIA station has almost the same ridership on weekends and weekdays due to the nature of air travel patterns

FY07 Ridership compared to FY06:

- Total trips increased by 5.0%
- Weekday trips increased by 5.1%

- Saturday trips increased by 6.3% and Sunday trips by 7.2%, continuing to show greater growth than weekday but not at the same level as over the ten-year period
- For the core system, 38 stations not including the SFO Extension, overall ridership grew 4.9%
- SFO Extension overall ridership showed a greater increase at 5.8%

Ridership by Market Area

It is also useful to view BART's ridership by its three main market areas:

- Transbay: trips between the East Bay and the West Bay, including downtown San Francisco
- West Bay: trips made within the counties of San Mateo and San Francisco
- East Bay: trips made within Alameda and Contra Costa counties

Figure 15 details the annual weekday trip averages for each market area.

Figure 15 Average Weekday Trips by Market Area

Average Weekday Trips by Market Area

market area.		Transbay	West Bay	East Bay
m 1	FY07	159,734	99,238	80,387
The data point out the	FY06	152,449	91,948	78,568
important role of	FY05	147,526	87,800	75,390
BART's transbay	FY04	145,991	85,637	74,942
trips, which for FY07	FY03	143,555	77,119	74,484
comprised about 47%	FY02	150,087	83,423	77,215
of total trips	FY01	164,964	87,939	78,683
 Bay Bridge travel 	FY00	152,036	83,657	74,575
data from the	FY99	133,506	75,938	69,239
Metropolitan	FY98	128,467	68,663	68,193
Transportation				

Commission show BART carries nearly half of the transbay morning and evening peak direction commute

- Transbay trips seem to be more sensitive to economic fluctuations than travel in the other market areas; comparing FY07 to FY01, when ridership was at its highest before the most recent economic downturn:
 - o Transbay trips decreased by 3.2%
 - o East Bay trips increased by 2.2%
 - West Bay trips, with the SFO Extension opening in FY04, are greater by 12.8%

BART Station Ridership Trends disaggregates BART's ridership by station and can be found in *Appendix B*. This table ranks each station's average weekday exits for the past six fiscal years. For FY07, the stations with the highest average weekday exits are ranked as follows:

- San Francisco's four downtown stations
- Balboa Park
- 12th Street/Oakland City Center
- 24th Street/Mission
- Downtown Berkeley
- 16th Street/Mission

CHAPTER

Operating Service Plan & Financial Plan

This chapter details BART's rail service plan and financial forecast for FY08 through FY17. Each year in the Short Range Transit Plan (SRTP) process, operating service and financial forecasts for the next ten years are developed to help guide BART's annual budget decision-making and identify potential problems or opportunities in the years beyond the budget.

The financial forecast for the draft SRTP was based upon the FY08 budget, which the Board adopted on June 14, 2007.

4.1 Operating Service Plan

Planning for BART's future requires forecasting how many riders BART will serve over each of the next ten years. The level of service BART provides needs to efficiently match its projected ridership. To achieve this efficiency, the District has to balance opportunities, such as adjusting train lengths to match demand, against constraints, such as the physical limitations of headway capacity.

Ridership Forecasts

Existing capacity can usually absorb moderate ridership increases or decreases; larger increases require advance planning, often of five to ten years or more.

BART uses a ridership forecast model to project future ridership. This model incrementally factors a current station-to-station trip table to account for regional population and employment growth projections, extensions, BART fare and service changes, and changes in competing travel markets (e.g., auto travel times and costs). The ridership forecast assumes funding and maintenance of the system at the current high level of customer and train on-time performance. The base for BART's current set of ridership forecasts is actual weekday origin-destination data from fall 2005, factored up to FY08 budgeted ridership levels. *Figure 16* shows the resulting ridership forecast through FY17 for the current 43-station system.

Figure 16 BART Ridership Forecast

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Weekday Trips (average)	348,598	354,269	360,015	365,841	371,898	377,882	383,946	390,090	396,343	402,706
Year-to-Year Growth		1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Annual Trips (millions)	104.4	106.1	107.8	109.6	111.4	113.2	115.0	116.8	118.7	120.6
Year-to-Year Growth		1.6%	1.6%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Annual Passenger Miles	1,417	1,442	1,469	1,494	1,521	1,547	1,573	1,600	1,628	1,656
(millions)										
Year-to-Year Growth		1.8%	1.8%	1.7%	1.8%	1.7%	1.7%	1.7%	1.7%	1.7%

The ridership forecast's main findings are as follows:

- After two years of higher than normal growth (3.9% in FY06 and 5.1% in FY07), average weekday ridership is budgeted to grow 2.7% in FY08.
- After FY08, ridership is projected to slow down to a rate slightly below historical long-term averages for FY09 through FY17.
- Using a conservative growth rate reflects the uncertainty of predicting passenger travel into the future, as BART's ridership is highly dependent on the health of the Bay Area economy.
- Total annual trips and passenger miles are projected to grow at approximately the same rate.

Service Planning

The inputs to BART's service planning model are the ridership forecast described above and operating constraints, for example, car loading standards. The model produces an operating plan for an entire weekday that includes

- Average car loads
- Headways
- Number of trains on each route
- Total cars and control cars required
- Peak trains on line
- Number of cars in maintenance
- Car hours and miles
- Train hours

Figure 17 BART Rail Service Forecast presents a preliminary overview of how BART might operate service to accommodate the projected 16% increase in ridership by FY17. Route headways are assumed to be 15 minutes.

Figure 17 BART Rail Service Forecast

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
TRAINS										
Base	51	51	51	51	51	51	51	51	51	51
Peak	61	61	61	61	61	61	61	61	61	61
Transbay Peak	24	24	24	24	24	24	24	24	24	24
Early/Late	25	25	25	25	25	25	25	25	25	25
CARS										
Peak Rail Cars	529	532	533	533	533	533	533	537	537	537
Total Car Miles (millions)	70.3	72.4	73.0	73.5	73.6	73.9	74.2	74.7	75.1	75.1
Total Car Hours (millions)	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4

The rail service forecast's main findings are as follows:

- Mid-way through FY08, BART plans the following service improvements:
 - A reduction of headways during evening and Sunday service from 20 minutes to 15 minutes. The moderate increase in net costs is included in the financial forecast.
 - o The single route service from Dublin/Pleasanton to SFO and Millbrae will be replaced by two-route service. Pittsburg/Bay Point trains will serve the San Francisco Airport station, while trains from Richmond will run to Millbrae. On nights and weekends, the Dublin/Pleasanton line will serve Millbrae instead of the trains from Richmond.
- Projected rail ridership through the end of the SRTP planning horizon can be served with the existing fleet of rail cars, although at increasing vehicle loads.
- Vehicle loading is projected to increase until new rail cars become available.
- Should ridership grow faster than currently projected (400,000 riders weekdays in FY17), BART will have limited ability to increase train lengths or add trains to accommodate the higher levels of ridership until new cars are purchased.

4.2 Operating Financial Plan

The Operating Financial Plan includes projected revenues, financial assistance, expenses, and capital allocations. Passenger revenue forecasts are calculated using output from the ridership forecast model described in the last section. Expense forecasts are developed through a multi-step process, with output from the ridership forecast model input to the service planning model which forecasts service requirements. Service planning model results, ridership forecasts, inflation assumptions, and other line item cost increases are input into BART's operating and maintenance cost model, and this model produces expense forecasts.

Forecasts are, as much as possible, consistent with or based upon regional forecasts and historical trends. Figure 18 BART Operating Financial History, details the District's historical financial results for the previous ten fiscal years.

Figure 19 BART Operating Financial Forecast details the current ten-year outlook for the existing 43-station system, based upon the FY08 budget. Major categories of revenues and expenses are described in the following sections.

BART anticipates revising the FY08 budget during the first half of the year to reflect several recent events. These changes include a final State Transit Assistance budget from the state, the new West Bay Long-Term parking program, funding to alleviate problems with demagnetized fare tickets and improve traction motor repair, as well as several items related to BART's energy purchases.

Forecast Assumptions

Growth assumptions for the major line items in the Operating Financial Forecast are summarized below, with additional detail provided in the following discussion. All line items are based upon the FY08 budget.

- Inflation: 3% annually, based upon long-term Bay Area growth rates
- Passenger fares: Growing by ridership growth and productivity-adjusted CPIbased fare increases (estimated at 5.5% every other year) through FY12 (the last year of Board-approved CPI-based increases)
- Sales tax: Higher FY08 base, then growing by 4% annually, based upon actual average annual growth over previous ten to 15 years
- Property tax: Growing by 5% in FY09, then 5.5% annually, based upon long term growth rates of actual BART receipts
- Labor costs: Based upon the current labor contract, and specific forecasts for major benefits, otherwise growing by combined 2.5% annually (assuming 2%) general wage increases and 0.5% for promotions and other factors that are not specifically related to labor contracts)
- Capital allocations: Growing by approximately 2% from the FY08 budget levels

Figure 18 BART Operating Financial History

BART Operating Financials SM	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
OPERATING REVENUE	1									
Net Rail Revenue	162.4	173.1	193.8	212.9	193.4	190.9	219.9	233.1	255.6	281.5
Express Bus, Shuttles & ADA	0.7	0.4	0.4	0.3	0.3	0.5	0.5	0.5	0.6	0.6
Subtotal Net Passenger Revenue	163.1	173.5	194.3	213.3	193.7	191.4	220.4	233.7	256.2	282.1
Parking Revenue	0.0	0.0	0.0	0.0	0.0	1.7	4.3	3.8	5.0	8.7
Other Operating Revenue	13.8	17.8	18.8	24.1	20.9	17.5	11.1	13.3	18.5	22.0
Subtotal Non-Fare Revenue	13.8	17.8	18.8	24.1	20.9	19.3	15.5	17.1	23.4	30.7
Total Operating Revenue	176.9	191.2	213.1	237.3	214.6	210.7	235.9	250.8	279.7	312.8
TAX & FINANCIAL ASSISTANCE										
Sales Tax Proceeds	144.7	151.8	170.9	191.6	172.8	167.4	170.6	178.4	191.7	198.8
Property Tax	13.4	14.4	15.5	17.0	18.7	20.3	21.4	22.4	24.3	27.4
STA & TDA Assistance	1.7	0.5	0.7	0.5	1.3	0.4	0.0	0.0	3.5	21.2
Measure B Paratransit	0.0	0.0	0.0	0.0	0.0	1.4	1.6	1.5	1.6	2.2
SamTrans - SFO Operations	0.0	0.0	0.0	0.0	0.0	0.6	18.4	14.7	10.2	4.7
Caltrain- Millbrae Station Joint Use	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.5	0.6
Allocations from One-Time Funds	2.5	0.0	3.2	0.0	0.0	0.0	0.0	12.0	0.0	0.0
Fed Section 5307 Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.9
Total Tax & Financial Assistance	162.2	166.7	190.3	209.2	192.7	190.1	212.3	229.5	231.8	281.8
TOTAL SOURCES	\$339.1	\$357.9	\$403.4	\$446.5	\$407.4	\$400.8	\$448.2	\$480.2	\$511.4	\$594.6
	-									
OPERATING EXPENSES										
Net Labor	213.4	215.7	226.9	239.6	246.8	247.6	275.1	313.1	315.0	326.7
Traction/Station Power	16.6	15.9	18.0	17.4	18.3	19.9	24.1	18.1	20.9	34.8
Other Non Labor	55.8	52.3	58.9	63.2	60.7	57.1	68.4	74.4	80.3	92.8
Subtotal Rail Operating Expenses	285.9	283.9	303.9	320.1	325.9	324.5	367.6	405.6	416.2	454.3
Express Bus Service	2.3	1.9	1.6	2.7	0.1	2.5	2.5	2.5	0.0	0.0
Shuttle Service	0.1	0.1	0.0	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0
ADA Paratransit Service	5.3	5.6	6.1	7.7	8.8	8.9	9.4	9.1	9.3	10.0
Purchased Transportation	2.7	2.6	3.2	3.6	3.6	3.3	2.4	2.3	2.4	2.7
Extraordinary Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7
Subtotal Non-Rail Expenses	10.3	10.1	10.9	14.0	12.5	14.7	14.4	13.9	11.7	35.4
Total Operating Expenses	296.2	294.1	314.8	334.1	338.4	339.3	381.9	419.5	427.9	489.8
DEBT SERVICE & ALLOCATIONS										
Debt Service Allocations	27.5	42.2	46.1	48.1	56.7	59.2	59.4	59.5	62.7	70.3
Capital & Other Allocations	15.3	21.5	42.5	64.3	12.3	2.3	8.5	5.5	15.4	25.4
Operating Reserve Allocations	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	8.1	7.6
Allocations to SFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5
Allocations in from SFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(5.5)
Total Debt Service & Allocations	42.8	63.7	88.6	112.4	69.0	61.5	67.9	65.0	78.1	104.4
TOTAL USES	\$339.1	\$357.8	\$403.4	\$446.5	\$407.4	\$400.8	\$449.8	\$484.5	\$506.0	\$594.1
ANNUAL FINANCIAL RESULTS	\$0.0	\$0.1	\$0.0	\$0.0	(\$0.0)	\$0.0	(\$1.7)	(\$4.3)	\$5.4	\$0.4
Rail Farebox Ratio	56.8%	61.0%	63.8%	66.5%	59.3%	58.8%	59.8%	57.5%	61.4%	62.0%
Farebox Ratio	55.1%	59.0%	61.7%	63.8%	57.2%	56.4%	57.7%	55.7%	59.9%	60.4%
Operating Ratio	59.7%	65.0%	67.7%	71.0%	63.4%	62.1%	61.8%	59.8%	65.4%	67.0%
Rail Cost/Passenger Mile	28.9¢	26.9¢	25.7¢	25.3¢	27.7¢	28.3¢	29.9¢	32.3¢	31.8¢	33.2¢
2331/1 433011901 141110	20.74	20.76	_0., ¢	20.00	-/ ·/ ×	20.0%	-/./,	02.00	51.0x	30.2¢

FY04 - FY06 negative financial results due to the Lakeside lease accrual - which is a book entry only and not budgeted.

Figure 19 BART Operating Financial Forecast

(Escalated \$M)	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
OPERATING REVENUE										
Net Rail Rev. Before Fare Increase	289.6	293.8	298.1	302.4	306.9	311.4	316.1	320.9	325.8	330.9
Rail Revenue From Fare Increase	8.0	16.3	24.8	33.5	43.4	53.7	54.6	55.5	56.4	57.3
Net Rail Passenger Revenue	297.6	310.1	322.9	335.9	350.3	365.1	370.7	376.4	382.2	388.2
ADA Passenger Revenue	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
Parking	9.4	10.1	11.2	11.4	11.5	11.7	11.8	12.0	12.2	12.4
Interest	6.4	6.7	6.8	7.0	7.2	7.3	7.5	7.7	7.9	8.1
Advertising	3.8	3.8	3.8	3.9	3.9	3.9	4.0	4.0	4.0	4.1
Other Operating	10.3	10.1	10.8	11.6	11.8	12.1	12.4	12.3	11.2	11.1
Total Operating Revenue	328.1	341.4	356.1	370.3	385.4	400.9	407.1	413.0	418.3	424.6
TAX & FINANCIAL ASSISTANCE	000 4	011.5	200.0	222.0	200.0	0.47.5	0.57.4	0.47.7	070 /	200.5
Sales Tax	203.4	211.5	220.0	228.8	238.0	247.5	257.4	267.7	278.4	289.5
Property Tax	29.3	30.7	32.4	34.2	36.1	38.1	40.1	42.4	44.7	47.1
5307 Strategic Maint. Plan (Fed)	5.1	5.3	-	-	-	-	-	-	-	-
5307 Rail Car Fund Swap (Fed)	22.7 3.7	22.7 7.4	22.7 8.0	- 8.7	- 8.8	- 8.9	9.2	- 0 E	- 9.8	10.1
STA/TDA Meas. B Paratran./Other Assist.	2.0	2.1	1.8	1.9	2.0	2.1	2.1	9.5 2.2	2.3	2.4
Allocation - From Op Reserve	1.3	Z.1 -	-	1.7	-	۷.۱	۷,۱	۷.۷	2.3	2.4
SFO Operations Subsidy	10.4	10.3	10.0	9.7	9.2	8.8	8.3	6.1	2.7	2.8
Millbrae UOM	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Total Financial Assistance	278.5	290.7	295.7	284.1	294.8	306.1	318.0	328.7	338.8	352.9
Total Sources	606.6	632.1	651.9	654.4	680.2	707.0	725.1	741.8	757.1	777.4
	000.0	002.1	001.7	00 1. 1	000.2	7 07 .0	7 20.1	7 11.0	7 07 .1	,,,
OPERATING EXPENSES										
Net Labor	335.9	349.3	360.6	372.0	384.1	396.3	408.5	421.7	434.4	446.8
Retiree Medical	21.5	40.5	31.7	37.1	42.9	48.9	55.7	57.5	59.4	61.4
OPEB Unfunded Liability *	22.1	-	-	-	-	-	-	-	-	-
Traction/Station Power	34.7	35.0	35.3	36.3	37.4	38.5	39.7	40.9	42.1	43.4
TransLink Fees	- 00.1	-	1.1	4.7	4.8	5.0	5.1	5.2	5.4	5.5
Other Non-Labor	83.1	85.9	88.1	91.3	93.3	96.8	99.0	103.8	106.1	110.0
Subtotal Rail Operating Exp Purchased Transp	497.3 2.7	510.7	516.7 2.9	541.5 3.1	562.6	585.6 3.4	608.0	629.2 3.7	647.4 3.8	667.1
ADA Paratransit Service	11.1	2.8 11.7	12.2	12.8	3.3 13.5	14.2	3.5 14.9	15.6	3.6 16.4	4.0 17.2
Rail Car Fund Swap Expense	22.7	22.7	22.7	12.0	-	14.2	14.7	-	-	17.2
Subtotal Non-Rail Expense	36.5	37.2	37.8	15.9	16.8	17.6	18.4	19.3	20.2	21.2
Total Operating Expense	533.9	547.8	554.6	557.4	579.3	603.2	626.4	648.5	667.6	688.3
DEBT SERVICE & ALLOCATIONS	000.7	0 17 .0	00 1.0	007.1	077.0	000.2	020.1	0 10.0	007.0	000.0
Bond Debt Service	60.3	63.6	63.8	66.8	54.6	52.0	52.2	52.6	52.9	53.3
Debt Service - MTC \$60M Loan	6.4	6.3	9.1	8.9	8.6	8.4	5.2	-	-	-
Capital Allocation	9.9	19.0	19.3	19.7	20.0	20.4	20.8	21.2	21.6	22.0
Phase 2 Renovation Allocation**	-	-	-	-	-	-	-	7.0	12.0	10.0
SFO Reserve Allocation	17.5	-	_	-	-	-	-	_	-	-
SFO Ancil Rev Reserve Allocation	-	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Earthquake Safety Allocation	-	-	12.5	12.5	12.5	12.5	-	-	-	-
Op Reserve Allocation	-	-	-	-	4.0	9.5	2.0	1.0	1.0	2.0
Access Improvements Allocation	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
CAPRA Allocation	-	-	0.5	0.6	-	-	-	0.3	0.9	1.2
Pkg Cap Repayment Allocation	0.1	-	-	-	-	-	-	-	-	-
Total Debt Service & Allocations	94.8	89.9	106.3	109.4	100.8	103.8	81.2	83.1	89.4	89.4
Total Uses	628.7	637.7	660.9	666.8	680.1	707.0	707.6	731.6	757.0	777.7
OPEB Unfunded Liability *	(22.1)									
Annual Financial Result	(0.0)	(5.6)	(9.0)	(12.4)	0.1	(0.0)	17.5	10.2	0.0	(0.3)
Cumulative Balance	(0.0)	(5.6)	(14.6)	(27.0)	(26.9)	(27.0)	(9.4)	0.7	0.8	0.5
Figure at all Book	. ,	. ,	. ,	. ,	. ,	. ,	. ,			
Financial Performance Indicators	FO 007	10.75	/O F07	/C 05	/C 007	/C 05	/1.00	FO 007	FO 007	FC 007
Rail Farebox Ratio	59.8%	60.7%	62.5%	62.0%	62.3%	62.3%	61.0%	59.8%	59.0%	58.2%
Farebox Ratio	55.9%	56.7%	58.3%	60.4%	60.6%	60.6%	59.3%	58.1%	57.4%	56.5%
Operating Ratio	61.5%	62.3%	64.2%	66.4%	66.5%	66.5%	65.0%	63.7%	62.6%	61.7%
Rail Cost/Passenger Mile	φ U.351	\$ 0.354	\$ 0.352	φ U.36Z	\$ 0.370	\$ 0.379	\$ 0.386	\$ 0.393	\$ 0.398	\$ 0.403

Unfunded liability for Other Post-Employment Benefits must now be recognized on financial records per GASB

^{**} For local match contributions, debt service for future potential bond issues, or direct allocation to critical capital projects

4.2.1 Operating Sources: REVENUE

Passenger Revenue

Net Rail Passenger Revenue

- Rail passenger revenue is projected based on the rail ridership forecast described in section 4.1.
- Fare increases in 2008, 2010 and 2012 are calculated using a Board-approved CPI-based fare formula that accounts for changes in inflation over the preceding two-year period, both nationally and locally, and is reduced by a productivity factor of 0.5% to account for increases in District labor and operating efficiencies.
 - o Effective January 2008, a CPI-based fare increase of 5.4% will be implemented, estimated to generate \$16 million annually in new revenue.
 - o The Board-approved CPI-based fare increase program is effective through 2012. Revenue generations are shown separately in the Financial Forecast.
 - o Estimates for the 2010 and 2012 fare increases are based on 3% CPI annually, resulting in 5.5% increases in each of the two years.
 - o Passenger revenue resulting from the fare increases is shown as a separate row in Figure 19.

ADA Passenger Revenue

- BART directly collects fare revenue from East Bay Paratransit Consortium trips.
- Paratransit fare revenue is a function of ridership. For the last couple of years, paratransit ridership has been relatively flat and is expected to remain flat for two more years. The SRTP projection is \$0.6 million for FY08 through FY10, after which it is projected to grow at 3% per year.

Other Revenue

Paid parking and telecommunication programs are among the largest of nonpassenger revenue sources. Other sources include interest earnings, advertising contracts, concessions, parking fines and forfeitures.

Parking Revenue – The East Bay Monthly Reserved parking program is expected to generate \$4.2 million in FY08. Core Daily Paid parking should contribute \$3.5 million, a \$1.0 million increase over FY07 year-end projections. Much of the additional revenue will come from the addition of three stations to the Core Daily Paid parking program – El Cerrito Plaza, Fremont and Fruitvale - with the rest of the increase coming from a full year of stations added to the program during FY07. Overall parking revenues are projected at \$9.4 million.

Longer term, as many as five more station could be added to Core Daily Paid parking through FY10 (Union City, Pittsburg/Bay Point, Castro Valley, San Leandro and Pleasant Hill). Beyond FY10 the parking program is expected to

- contribute revenues between \$11 million and \$12 million per year. Staff will continue to seek additional opportunities for new parking revenues where appropriate.
- Interest Revenue Higher investment returns are behind the \$6.4 million interest revenue projection for FY08. These revenues are expected to grow by 2.5% annually in the long term.
- Advertising The poster advertising contract is expected to generate \$3.8 million in FY08, growing to just over \$4.0 million by FY17. The current contract expires in fall 2008 and the District plans to negotiate a new contract. Future revenues are based upon a continuation of current levels of ad revenue, which is expected to grow at a modest rate. In addition to the District's poster franchise, new forms of advertising including tunnel advertising and video ad programs on trains and in stations are expected to be added over time. Revenue from these programs is not reflected as amounts that might be generated are not yet known.
- **Telecommunications** The FY08 budget includes just under \$4.0 million from twelve fiber optic carriers, \$0.8 million from cell sites on BART property and \$0.9 million for cost reimbursements and expected new business. The long-term outlook for telecommunications revenue is based on the continuation of existing contracts.

Categories not tied to contracts are forecast to keep pace with inflation.

4.2.2 Operating Sources: FINANCIAL ASSISTANCE

Sales Tax

BART's largest source of financial assistance is a dedicated 75% share of a one-half cent sales tax levied in the three District counties. After several years of declines, sales tax assistance has started to recover. In addition, sales tax revenues are used regularly to support bond sales for the District's Capital Improvement Program, as described in Chapter 5.

While sales tax revenues grew at 7.4% in FY06 over FY05, preliminary results for FY07 show growth of only 3.7%, and the long term forecast reflects a more moderate trend of annual 4% growth, which is in line with average growth rates in District sales tax generation over the past ten to 15 years.

Property Tax

BART receives a dedicated property tax assessment in the three BART counties. This assessment is separate from two general obligation bonds paid by property tax assessment: the initial \$792 million bond which funded construction of the original BART system and was fully retired in 2000, and the 2004 \$980 million Earthquake Safety Program bond.

In recent years property tax revenues have been growing rapidly, averaging 7.9% over the last five years. This growth is due mainly to the continued strength of the housing market. However, due to recent uncertainty and weakness in the housing market, over the long term, property tax is forecast to return to an annual growth rate of 5.5%, approximating the District's historical average.

Strategic Maintenance Plan (Federal 5307 Reimbursement)

BART is in the second year of a multi-year program to improve preventative maintenance practices in its revenue vehicle shops. This Strategic Maintenance Program (SMP), discussed in Chapter 2, is eligible for Federal 5307 grant funds. BART expects to again receive approximately \$5 million a year for this program in FY09.

Rail Car Fund Swap (Federal 5307 Reimbursement)

As in FY07, federal preventive maintenance grant funds of \$22.7 million are available through MTC in FY08, FY09 and FY10 to be used for rail car replacement. These grants are recorded by BART in the Financial Assistance category, and then transferred to MTC as an expense to be placed in a sinking fund for future rail care replacement. The net result of the assistance and expense to the budget's bottom line is zero. As rail cars age and maintenance needs increase, it is difficult to keep enough cars in service to meet demand. Having a source of funds for car replacement is critical. The four-year total of approximately \$90 million being added to the sinking fund represents approximately 4% of the total projected rail car replacement cost of \$2.1 billion.

STA/TDA

BART receives transportation funding assistance from appropriations of State Transit Assistance (STA) and Transportation Development Act (TDA) funds. STA funds are based principally on operator revenues and population of service areas, but ultimately the state sets annual STA appropriation levels. Funds through TDA are generated by a one-quarter cent sales tax returned to each county based on sales tax generation. The collections fluctuate geographically and with the health of the economy. These funding sources have not been consistent throughout the years and are subject to actions in the governor's state budget. In some years, the District received no STA or TDA funds.

According to a regional transportation agreement with MTC, BART directs its STA and TDA funds first to East Bay operators that provide connecting service to BART. For FY08, this transfer amounts to \$11.2 million. About half the funds, or approximately \$5.1 million, are transferred to AC Transit with the balance split, based on historical shares, among WestCAT, Wheels, County Connection and Tri-Delta. BART then claims any remaining funds.

In FY07, due to a complex state funding formula generating spillover revenues for the first time in many years, BART was eligible to receive about \$43 million in STA funds, an unprecedented amount. Of this, \$10.3 million was allocated to other bus operators, \$10 million was used to pay down the \$60 million loan obligation to MTC, and \$11.2 million was used to balance the FY07 budget. The remaining amount will be claimed in FY08 and likely be placed into reserved to fund BART's retiree medical obligation.

The adopted FY08 state budget redirects spillover away from transit to the state's general fund and also reduces base STA revenues, leaving BART a net of \$9.7 million in STA funds. The drop in STA between FY07 and FY08 highlights the volatility of this fund source.

Proposition 42, discussed further in Chapter 5, modified the programming of gasoline sales tax revenues by permanently dedicating them to transportation purposes beginning in FY04. Starting in FY09, 20% of the revenue will be allocated to public transportation, which will mean a second, larger increase in STA funds for transit. This is estimated to stabilize STA funds for BART in the range of \$7 to \$10 million annually. This assistance can be programmed for general operating expenses as well as BART's ADA paratransit program.

Measure B Paratransit/Other Assistance

Alameda County's Measure B one-half cent sales tax provides about \$1.5 million of annual funding for BART's paratransit service operations. This fund source will continue through 2022. Forecast annual growth of 4% is based on expected sales tax growth in Alameda County.

Also included in this category is funding from Caltrans in FY08 and FY09 to offset additional service provided during Bay Bridge closures due to construction.

Allocation from Operating Reserve

For the FY08 budget, \$1.3 million from expected FY07 favorable net operating results was allocated to fund one-time costs of new budget initiatives.

SFO Extension Operating Subsidy

The SFO Extension consists of five stations in San Mateo County: Colma, South San Francisco, San Bruno, SFIA, and Millbrae. Colma began operation in 1996 and the remaining four stations opened in 2003.

The FY06 SRTP Operating Financial Plan included the impact of the SFO Extension operating cost formulas contained in the 1990 BART-SamTrans Comprehensive Agreement and subsequent amendments, as well as the 1999 BART-SamTrans-MTC Memorandum of Understanding. In 2004, BART and SamTrans refined administrative details and clarified issues that arose during the first year of service, resulting in an additional agreement governing operation of the Extension.

Under the terms of the Comprehensive Agreement, San Mateo County Transit District (SamTrans) was responsible for reimbursing BART for any net operating deficits on the SFO Extension. The District was to transfer any net operating surplus revenues generated from this service toward meeting SamTrans' remaining capital contribution obligations. BART and SamTrans equally split any net revenues generated by ancillary programs, including parking or concessions such as advertising or pay phone revenues.

During FY07, with the aid of MTC, BART and SamTrans reached a resolution regarding the financing of operations to the five SFO Extension stations. The resulting agreements turn the operation of the Extension over to BART, with monetary contributions from SamTrans and MTC to offset the cost of operating outside the District. BART will continue to track and report the operating costs and revenues for the Extension. The key terms of the agreements as related to the operating budget are as follows:

- BART will have full responsibility over Extension operations, including service levels, fares and other operating revenues, and any resulting deficit.
- MTC and SamTrans will provide a combined \$56 million of up-front funding from FY07 through FY09, which will be placed in a reserve account and be first used to fund any operating deficit on the Extension, then to complete the funding commitment of \$145 million to the Warm Springs Extension project.
- BART will also receive two forms of ongoing subsidy. Beginning in FY09, 2% of San Mateo County's Measure A half-cent sales tax, currently equal to approximately \$1.2 million per year, will be allocated to BART for 25 years. BART will also receive additional STA revenue-based funds from SamTrans' annual Proposition 42 increment of approximately \$0.1 million in FY08, increasing to \$0.8 million in FY09, until the Warm Springs Extension funding is completed.
- BART retains 100% of ancillary revenue (parking, advertising, joint development, etc).

Caltrain-Millbrae Station Joint Use, Operations, and Maintenance Agreement As part of operating service to the joint BART/Caltrain station at Millbrae, Caltrain is required to pay for the use, operating, and maintenance costs at the station applicable to Caltrain service and passengers. This agreement expires after FY08 and will be renegotiated, with financial and operating arrangements expected to continue largely unchanged.

4.2.3 Operating Uses: EXPENSES

BART uses its operating and maintenance cost model to forecast fiscal year operating expenses. Model output is calibrated to the FY08 Budget, with adjustments made to reflect non-linear expense items, anticipated revisions to unit costs, and new cost items not reflected in either the cost model or the current year budget.

Key inputs to the cost model include forecast annual passenger trips, route miles of track and number of routes, and number and configuration of stations (i.e., subway, at-grade, etc.). Additional parameters provided from the service planning model include peak online trains and cars, number of cars in the fleet, and annual car miles, car hours and train hours.

The cost model input also includes assumptions for inflation, currently projected at 3% annually, for most categories. Operating expense is estimated to increase annually based on a combination of expenses, including the cost of negotiated labor contracts, system expansion, service changes, inflation growth, and agreements with other agencies and service providers.

Net Labor Expense

Labor cost, which includes both wages and benefits, is the primary driver for the District's operating uses, composing about 70% of the District's operating expense. Labor costs reflects the wage and benefit increases included in the FY06 through FY09 labor agreements, including 2% and 3% wage increases for FY08 and FY09, respectively.

A major goal of the negotiations was to resolve issues related to employee and retiree medical insurance costs, particularly funding retiree medical on an actuarial basis. The outcome of the negotiations resulted in a "ramping up" plan, which gradually increases contributions to a retiree medical trust fund until full actuarial funding is achieved in FY14.

Another key component of the negotiations was to rely upon savings and efficiencies brought about by implementing the District's Business Advancement Program (BAP). BAP will replace all of the administrative business systems at BART. Phase 1 replaced the time keeping, human resources and payroll systems and was completed in FY07, with labor savings in each of those areas. Approximately \$1.7 million in annual savings from the elimination of clerical positions will take place in FY09. Additional savings will also come from improved management of the District's benefit enrollment as well as labor efficiencies in fore worker, supervisor and manager performance.

Phase 2 of BAP has begun and will take approximately two years, replacing the materials management, accounting, and MARIS systems. Projected cost savings will be based upon high-level industry standard assumptions and are deemed reasonable for the District's plans. Maximums, the systems integrator, will be providing specific information on projected savings for Phase 2.

The escalating cost of medical benefits continues to be a serious financial challenge, not only for the District but also for the entire country. FY08 projections include:

- 11.4% increase in active employee health insurance costs, which continue to grow at double-digit rates.
- \$21.4 million payment for retiree medical, which is the sum of the District's first actuarial payment together with the traditional "pay as you go" expense.
 - o Governmental Accounting Standards Board (GASB) financial reporting rules require state and local governmental employers that provide postemployment benefits such as retiree medical to recognize the full liability of these benefits. These rules affect the District's budgetary and financial reporting in FY08 as they do all larger government entities.
 - o Per GASB regulations, the unfunded liability for the current year budget (\$22.1 million for FY08) is shown as an expense and an offset and does not affect the annual net result. Both are labeled in the financial forecast as Other Post-Employment Benefit (OPEB) Unfunded Liability. The unfunded liability for FY10 through FY13 (before full compliance in FY14) has not been calculated yet.

Traction and Station Power Expense

Electrical power costs are a sizable component of the District's operating budget. Annually, the District uses about 375,000 megawatt hours of electrical power, making BART one of Northern California's ten largest users.

Recognizing the large impact that power supply has on the District's operating expenses, BART has obtained authority from the California legislature to purchase electrical power from sources other than the Pacific Gas and Electric Company (PG&E). Under legislation enacted in 1995, the District procured low cost-based power from the federal Bonneville Power Administration (BPA) through FY06. In 2004, BART obtained expanded statutory authority from the California legislature that permits BART to purchase power from municipal utilities as well as federal power marketing agencies. Under these expanded provisions, the Northern California Power Agency (NCPA) has replaced the expiring BPA supply by procuring market-priced power on behalf of the District. FY08 is the second year that the District's power supply is being provided primarily through market purchases. The federal Western Area Power Administration will continue to supply a small amount of power under an existing contract through FY24.

While BART's power costs increased approximately 80% with the expiration of the Bonneville contract, the cost is still below the rates for service provided by PG&E. Over the long-term the District will seek to reduce its exposure to power market cost fluctuations through joint ownership with municipal utilities of power generation facilities and to increase the District's use of renewable energy resources. Another goal is to reduce power usage through conservation efforts.

The estimate for the cost of power through FY10 is based on the market supply under the new NCPA contract. The estimates beyond FY10 assume 3% annual increases. The District must purchase transmission and distribution services from PG&E to deliver its power supplies, and these delivery costs are forecast to increase at the general rate of inflation, or 3%.

State law requires investor-owned utilities, such as PG&E, to have 20% of their electricity supply provided by renewable energy resources by 2010. Although this law does not apply to BART, the District has decided to meet or exceed this same environmental goal for its electrical power supply. The goal is established as part of the District's Strategic Plan for Energy Procurement, Currently, the District receives approximately 5% of its power supply as hydroelectric power from the federal government and has decided to procure the remainder of its renewable power supply through the Green Power Pool administered by the NCPA. It is expected this cooperative approach with municipal utilities will yield a diverse and lower-cost supply of renewable energy. Negotiations with potential suppliers are underway and include wind, landfill gas and biomass renewable power projects. District staff is preparing to have a comprehensive survey of BART property completed to determine appropriate sites for potential photovoltaic (solar) projects.

Other Non-Labor Expenses

Non-labor expenses include materials usage, rental and maintenance contracts, insurance, utilities other than traction and station power, professional and technical services and other miscellaneous expenses.

The San Francisco International Airport (SFO) requires the BART-SFO Extension to pay a \$2.5 million annual rent to the airport. Required as a condition of operating rail service into the airport, this obligation will continue for fifty years, until July 2051. BART continues to seek a solution leading to relief from this obligation.

TransLink, an MTC-coordinated multi-agency fare medium, is projected to come online for BART in FY10. By FY11, MTC estimates call for BART to pay annual TransLink fees of approximately \$5 million per year, based upon projected usage and transaction amounts.

Most other categories are assumed to increase at the rate of inflation.

Purchased Transportation

BART pays Muni for providing feeder bus service to BART stations in San Francisco. This expense is budgeted at \$2.8 million in FY08, and per agreement with Muni, changes each year by the rate of change in sales tax assistance the District collects.

Based upon actual receipts for the past several years, the forecast also anticipates annual net profits of about \$0.1 million from the AirBART connecter bus service to the Oakland Airport until the Oakland Airport Connector (OAC) project opens in FY12.

ADA Paratransit Service

BART's paratransit program has been operating under full federal compliance since 1997. Expenses, which rapidly escalated during the program's early days, have started to stabilize. National experience suggests that annual expense growth rates are highly variable, but can range as high as 10% to 15%. BART's paratransit program will continue to look for ways to control costs while providing compliant service.

The Operating Financial Plan forecasts expenses of \$11.1 million for FY08 and a subsequent growth rate of 5% per year.

Rail Car Fund Swap Expense

As in FY07, federal preventive maintenance grant funds of \$22.7 million are available through MTC in FY08, FY09 and FY10 to be used for rail car replacement. BART records the grants in the Financial Assistance category, and then transfers them to MTC as an expense to be placed in a sinking fund for future rail care replacement. The net result of the assistance and expense to the budget's bottom line is zero.

4.2.4 Operating Uses: DEBT SERVICE AND ALLOCATIONS

BART's base financial forecast includes fiscal obligations from operating sources for debt service, allocations to support the capital program, and other allocations as required by agreements with other agencies.

Bond Debt Service

BART first issued bonds backed by sales tax revenues in 1970 and has periodically sold additional bonds to finance or refinance the capital costs of constructing, improving, renovating and equipping the system. The current outstanding principal for all outstanding sales tax revenue bonds is about \$764 million. BART's last bond sale was in November 2006, with the issuance and refunding of bonds totaling \$108

million. There are no plans to issue additional sales tax debt until at least 2012, when additional debt pay-off will allow for some additional capacity. Annual debt service for all current bonds will decrease from \$60.3 million in FY08 to \$52.0 million by FY13, as debt service from earlier bond sales is retired.

In 2006, BART and MTC entered into an agreement for repayment of a 1999 \$60 million loan MTC made to BART for SFO Extension project cash flow requirements. Under the terms of the agreement, BART will repay MTC over nine years. The first payments were made in FY06.

Capital Allocations

In FY97, the District initiated a program of planned reinvestment from annual revenues into the capital program. These annual allocations are used for many critical capital projects that do not qualify for grant funding or for which other funding sources may not be available. Representative uses of allocations include station renovation, purchase of capitalized tools, inventory parts and non-revenue vehicles, as well as local match for grant funds. The amount to be allocated for these purposes grows at approximately 2% annually. Typical basic capital allocations run from \$10 million to \$12 million per year, with about the same amount for matching funds.

Allocation to Phase Two Renovation

Towards the end of the SRTP forecast, BART anticipates allocating approximately \$30 million to a program for future Phase Two Renovation Program. Funds allocated to such a program could be used for local match contributions, debt service for future potential bond issues, or direct allocations to critical capital projects.

Allocation to SFO Reserve

The \$24 million of MTC funding that is part of new operating agreement governing the BART-SFO Extension came to BART as capital funds. Since these funds need to be in an operating reserve, in FY07 and FY08, BART substituted these capital funds for planned operating allocations for federal grant matching funds. The operating funds were then placed into the SFO extension reserve to be used for operating subsidy as needed. See also the SFO Operations Subsidy section under Sources.

SFO Ancillary Revenue Reserve

BART recently implemented a Long Term/Airport Parking program at SFO Extension stations. This program was not part of the FY08 budget, as it was introduced after the budget was adopted, but will be included in any FY08 budget revision. Net revenues from this program, which has started off very successfully, are planned to be placed in a reserve to offset future cost increases that might

exceed those anticipated in the new financial agreement governing operation of the extension.

Earthquake Safety

BART is required to fund \$50 million as part of the \$1.3 billion "Systemwide Safety, Core System Operability" portion of the Earthquake Safety Program. Allocations to this project from operating sources totaling \$50 million are planned between FY10 and FY13. (See section 5.3 for more information on the Earthquake Safety program.)

Access Improvements

In 2006, the BART Board adopted a policy to allocate, as part of the annual budget appropriation, \$625,000 for station access improvements for FY07, FY08 and FY09. Projects would be determined based upon ability to leverage additional funding, to generate additional ridership, have broad community support, and to be cost effective. Additionally priority in projects would be given to stations that had implemented daily parking fees. Staff has developed a three year plan that recommends 31% of funds be allocated for station mapping and web information projects, 21% for station appearance improvements, 21% for bicycle projects, 16% for pedestrian improvements and 11% for transit/shuttle projects. For planning purposes, it is assumed that this allocation is extended by the Board beyond FY09 at the same level.

CAPRA

BART allocates Premium Fare revenue from the SFO station generated in excess of required SFO Extension debt service to a capital reserve account (CAPRA) for the extension.

Operating Reserve

The District's Financial Stability Policy sets a goal to set aside operating reserves at 5% of operating costs. The current balance of \$15.8 million is only 3%, not quite meeting the 5% goal. In this financial forecast, allocations to the operating reserve to bring it up the 5% goal are planned when forecast operating results allow, mainly between FY12 and FY17.

Parking Capital Repayment

Half of the parking revenue generated by the West Bay Parking Program (currently fees are charged only at the Colma station) is allocated first to pay back programrequired capital equipment costs and then to operating uses once the equipment costs are paid back. This program is anticipated to be paid back by FY08, if not sooner.

4.3 Long-Term Outlook

During the recent economic downturn that lasted several years, the District placed great emphasis on maintaining service levels and quality standards in the interest of retaining riders. This focus was possible due to several years of difficult decisions the BART Board and management made, which included adopting the CPI-based fare increase program, developing and adhering to BART's Financial Stability Policy, and making budget reductions over consecutive years while holding the line on costs. The efforts to maintain a high level of service quality paid off as BART was able to stabilize its operating finances fairly quickly after the end of the downturn and even add limited new initiatives to the adopted FY08 budget.

The FY08 budget presented an opportunity to restore funding to certain areas that multiple years of budget cuts had adversely impacted. Funding has been increased in the areas of enhancing the customer experience, including increasing service frequency for nights and weekends, car and station cleaning, service reliability and station re-lamping. New initiatives also focused on investing in BART's employees through new employee development and training programs.

In this forecast, the District remains focused on financial stability. Plans include rebuilding operating reserves depleted by recent years of deficits, in accordance with the Financial Stability Policy, to at least 5% of total annual operating expenses. In the future, more than 5% may be required to achieve a prudent reserve level. The District also is obligated to contribute \$50 million to the Earthquake Safety Program. In addition to those programs, the focus must turn to increasing and improving service, continued emphasis to increasing security, and funding the Capital Program including a second phase of the system renovation program that is currently under development.

However, significant challenges remain. The funding added in FY08 does not completely restore years of cuts in the area of station cleaning. The current operating and financial forecasts include moderate annual service increases, as discussed earlier in this chapter. Should ridership grow more than forecast, additional service may need to be added. Without the purchase of additional cars, BART's ability to add service is limited. Today's operating environment also requires more attention to security, which comes with increased operating costs. The capital program discussed in the next chapter presents numerous funding challenges as well.

Funding assistance, in the traditional form of state and federal grants, remains limited and highly competitive. BART, like other public agencies, must strategize for other sources of funds, including direct allocations from operating sources, future bond sales, and unique opportunities such as public-private partnerships.

With regard to the projected small deficits, ranging from \$6M to \$12M for the next few years, it is important to remember that the SRTP forecasts are based upon certain assumptions. The actual outcome could be quite different. If revenues increase more than projected, or if expenses grow less than projected, the deficit could be reduced. Conversely, lower revenues or higher expenses than projected could produce a larger shortfall.

As the District has done in the past when developing annual budgets, strategies, particularly those that provide long term solutions, will be developed and adjusted to fit actual circumstances. For example, after the dot-com bust of 2001, the District experienced the largest declines in passenger revenue and sales tax in its history. In order to balance budgets over the next few years, staff developed and the Board enacted a combination of solutions. Pursuant to the Financial Stability Policy, adopted in 2003, fares were raised moderate amounts and parking fees were implemented. Judicious reduction of staff and delaying certain allocations to capital projects were two of the methods used to reduce expenses. In fact, the projected deficits in the current SRTP represent less than 0.4% of the Operating Financial Plan forecast over a ten-year timeframe – much smaller than actual deficits solved in the recent past.

System Expansion: Operating Financial Plans 4.4

MTC's Resolution 3434 requires that expansion project sponsors demonstrate the financial capacity to operate and maintain the expanded service programmed in the RTP. To that end, operating financial forecasts for BART's expansion projects through the SRTP timeframe are detailed in Figure 20 BART Operating Financial Forecast: Expanded System. These projects are the West Dublin Station, the Oakland Airport Connector (OAC), the Warm Springs Extension (WSX) and the East Contra Costa Rail Extension (eBART). Additional project details are discussed in the System Expansion section of Chapter 5.

The District clearly recognizes the need to balance the operating budgets for the existing system before undertaking operations of any expanded service. However, as the previous section indicates, BART has balanced prior budgets using strategies that also improve the long-term outlook.

West Dublin/Pleasanton Infill Station

This project is an infill station in the median of I-580 between Castro Valley and Dublin/Pleasanton stations. Construction started in 2007. The mixed-use project includes residential, hotel, office and parking facilities and is projected to open in FY10. This project was included in the 2001 RTP, but as it has received all required public funds for construction, it will not be included in the current RTP.

Oakland Airport Connector

The OAC project will provide a high quality link between BART's Coliseum Station and the Oakland Airport using a direct and exclusive aerial guideway for transit vehicles. The OAC is projected to open for revenue service in FY12. The 3.2mile connector will provide a transit alternative to driving an automobile and the overall airport traffic situation will benefit from reducing the number of cars on the road. Depending upon the technology, trains are forecast to operate at a maximum 8.2 minute headway during the peak hour and could be as frequent as every 3 minutes. Peak hour ridership is expected to grow from 1,400 passengers in 2011 to 3,900 passengers by 2030. In May 2007, the OAC was selected as the first project to participate in a U.S. Department of Transportation (USDOT) pilot program that will evaluate the benefits of forming public-private partnerships in transit construction.

Warm Springs Extension

The Warm Springs Extension, consisting of a one-station, 5.4 mile extension south of the Fremont Station in Alameda County, is expected to open for revenue service, funding permitting, by the middle of FY14. Approximately 2,040 parking spaces are planned for this station. Subject to funding by the City of Fremont, a second optional station at Irvington may be added at a later date. This extension, which will include a subway beneath Fremont Central Park but will otherwise run mostly at-grade, is the first segment of the extension to Milpitas, San Jose, and Santa Clara.

East Contra Costa BART Extension (eBART)

This proposed extension, designed to improve transit service in the congested California State Highway Route 4 (State Route 4) corridor, consists of a 21-mile extension eastward from the Pittsburg/Bay Point BART station. Rail service in the form of diesel-powered trains is proposed to be provided for the Contra Costa County communities of Pittsburg, Antioch, Oakley, Brentwood, and Byron/Discovery Bay. The current Proposed Phase 1 alignment would be in the median of State Route 4. This Phase 1 project will serve Pittsburg and Antioch with a transfer platform at the Pittsburg/Bay Point BART station and stations at Railroad and Hillcrest Avenues. Environmental review began in July 2005 and is ongoing, and preliminary engineering is underway. Further detail is provided in Chapter 5 in the System Expansion section.

Figure 20 BART Operating Financial Forecast: Expanded System

(\$ M)	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
43-Station System										
Total Sources	606.6	632.1	651.9	654.4	680.2	707.0	725.1	741.8	757.1	777.4
Total Uses	606.6	637.7	660.9	666.8	680.1 0.1	707.0	707.6 17.5	731.6 10.2	757.0 0.0	777.7
Net Operating Result	(0.0)	(5.6)	(9.0)	(12.4)	0.1	(0.0)	17.5	10.2	0.0	(0.3)
West Dublin										
§ Fares			2.1	2.8	3.7	4.3	5.1	5.6	6.2	6.7
Parking			0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
[∞] TOTAL			2.2	2.9	3.9	4.6	5.3	5.9	6.4	7.0
Operating Expense			2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.7
Difference dedicated to			0.0	0.7	1.6	2.2	2.9	3.4	3.8	4.4
bond debt service Net Operating Result			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Her Operating Result			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oakland Airport Connecto	or									
Passenger Revenue					11.1	14.5	16.1	17.2	18.8	19.9
Operating Expense					7.9	8.1	8.3	8.5	8.8	9.0
Debt service (loan					12.6	13.0	13.3	13.7	14.1	14.4
payment)					0.4	, ,	<i></i>	5 0	4.0	2 (
Revenue startup reserve Net Operating Result					9.4 0.0	6.6 0.0	5.5 0.0	5.0 0.0	4.0 0.0	3.6 0.0
Net Operating Result					0.0	0.0	0.0	0.0	0.0	0.0
Warm Springs										
Fares							4.9	10.2	10.7	11.2
Fares Parking TOTAL							0.3	0.6	0.6	0.7
							5.2	10.9	11.4	11.9
Operating Expense							5.2	10.9	11.3	11.7
Net Operating Result							0.0	0.0	0.0	0.2
eBART										
9 Fares								4.5	4.6	4.8
Fares Parking TOTAL								0.4	0.4	0.4
[®] TOTAL								4.9	5.0	5.2
Operating Expense								7.8	8.0	8.2
Net Operating Result								(2.9)	(3.0)	(3.0)
NET OPERATING RESULT	(0.0)	(5.6)	(9.0)	(12.4)	0.1	(0.0)	17.5	7.3	(2.9)	(3.1)

CHAPTER

5

Capital Improvement Program

This chapter will provide an overview of BART's capital funding and program needs, an outline of planned capital improvements identified within discrete program areas, and current information on project funding status.

A major change from the FY06 Short Range Transit Plan and Capital Improvement Plan (CIP) is the extension of the CIP horizon years from 10 to 25 years. This approach is intended to ensure the CIP capital needs information is consistent with the District's needs as included in the Metropolitan Transportation Commission (MTC)'s T2030 Regional Transportation Plan (RTP) and the District's 30-year Plan. The revenue forecast in the CIP, however, will be more conservative than that assumed by MTC, but will be consistent with revenue forecasts included in prior 10 year CIPs. This will result in a larger capital program shortfall in this year's CIP than that of the RTP. The goal of this approach is to provide a more realistic look forward to the challenges the District faces in securing grant funding and to focus attention on the need for continuing and ongoing advocacy for this funding at the local, state and federal level.

The CIP 25-year plan will chart the course to maintain and enhance the District's service by renovating and strengthening the core system, improving the safety, security and reliability, and expanding the system. This new, revised CIP will capture all of the capital assets that will need to be replaced, rehabilitated or extended to ensure that the District meets its service goals in the District's Operating and Strategic Plans.

5.1 Capital Funding

Long term capital planning and programming documents exist at the county, state and federal level, yet most capital funding decisions are made in the near term, typically in a 1-5 year window. It is difficult to forecast the success rate of grant funding 25 years in the future when economic, political or legislative factors can have an immediate, near term impact on available transportation revenues. Competition for limited transportation funds among transit operators within the region is keen. Just because a BART renovation project exists in a twenty-year county plan or in MTC's RTP, does not guarantee that this project will be funded when the appropriate year comes. As an example, replacement of BART's entire fleet of 669 revenue vehicles is forecast to be fully funded within the RTP vet no specific funding plan exists for this approximately \$2 billion project.

Given these circumstances, and the magnitude of the District's capital needs over the next 25 years, a very aggressive approach to grant advocacy will be necessary. Advocacy for specific project grant funding must be continuous at the county, regional, state and federal levels from the moment the project is approved in a long term capital plan to the year that the grant application itself is approved. This process is labor intensive, time consuming and can require ongoing advocacy on the part of District staff, Board members and other elected officials

The District's needs have grown as transit capital funding becomes more complex and difficult to secure. There has been an increase in funding regulations and restrictions at the federal, state, and local levels and funding decisions have become increasingly localized. Competition among the transit operators has increased due to the increased capital replacement needs stemming from aging equipment, increased usage, and the limited funding available. The fact that the District operates in four counties impedes local "ownership" of systemwide capital needs, which reduces the District's ability to secure local funding for these systemwide needs.

The District began revenue service 35 years ago and currently carries 100 million annual riders over 1.4 billion passenger miles. It serves the Bay Area at 43 stations over 104 miles of trackway in four counties – Alameda, Contra Costa, San Francisco, and San Mateo. A combination of factors – the age of the system, the fixed guideway nature and dedicated right of way, and the geographical span – have combined to create the single largest capital replacement and renovation need of any transit operator within the region.

Planning for Funding

Under federal law, MTC, along with other metropolitan/regional transportation organizations, is required to submit to the FTA every four years its' RTP. Projects must be included in an RTP in order to receive funding. MTC's current RTP, adopted in February 2005, is called T2030. The planning process for the 2009 RTP, called T2035, has recently begun.

The RTP process provides policy direction to county-level funding agencies regarding many issues and projects of relevance to the BART District. For example, MTC sets policy for each of the counties to follow regarding funding of reinvestment and rehabilitation of transit systems, a topic of particular concern to BART. The process of updating county plans begins when the individual counties take the series of budget assumptions and policies provided by MTC and use them to develop their individual Countywide Transportation Plans. The resulting county transportation priorities feed into a region-wide planning process conducted by the MTC, which culminates with the development and adoption of the RTP.

A subset of the RTP is the regional expansion program or the RTEP, which presents the regional priorities for expansion. The adopted Regional Transit Expansion Plan (RTEP), otherwise known as Resolution 3434, includes proposed funding plans for extensions of BART to Warm Springs, to San Jose, to the Oakland Airport and expansion in the Route 4 median in East Contra Costa County (eBART). In April 2006, MTC adopted the updated Resolution 3434 or the RTEP. MTC is expected to update Resolution 3434 as part of the 2009 RTP.

Funding Developments Since FY06

On November 7, 2006, California voters approved \$42 billion in an Infrastructure Bonds package. This is the largest public investment in California's infrastructure ever to provide funding for the state's transit, road, schools, levees, housing, and other public works projects. Among the propositions approved, three transit-related bond propositions could provide funding for the District's transit and transit oriented development (TOD) capital projects. The propositions are as follows:

- Proposition 1A: This proposition protects Prop 42 funds from being diverted for other uses besides transportation and transit projects. These funds come from a portion of the sales tax on gasoline.
- Proposition 1B: Transportation Bond.
- Proposition 1C: Housing Bond.

Most of the District's funding opportunities are expected to come from Proposition 1B. These funding opportunities are from the following categories in Prop 1B:

- 1. State and Local Partnership: \$1 billion is estimated to be available statewide; CTC/MTC are currently establishing guidelines for the 5-year process for programming and allocation. Most likely these funds will be used to match transportation sales taxes and local tolls for extension projects.
- 2. Transit Security & Disaster Response: \$1 billion is expected to be available statewide but further guidance is needed from the legislature prior to any allocations.
- 3. Seismic Retrofit: \$125 million is estimated to be available statewide; The District may be eligible for \$12 to \$16 million of these funds for the Earthquake Safety Program.
- 4. Modernization: The District expects to receive \$206 million directly from this category for its Station Modernization Program, as well as \$20 million each going to the WSX and the eBART Project.
- 5. Expansion: \$34 million in MTC-controlled population-based bond funds were recently programmed to expansion projects with the potential for an additional \$6 million from other MTC sources.

Federal Funding

The main source of funding for the District's capital needs continues to be FTA Section 5307 and 5309 formula funds. MTC, designated by FTA as the region's Metropolitan Planning Organization (MPO), distributes the Section 5307 funds to the 5 large and 7 small urbanized areas in the Bay Area. In general, large urbanized area formula funds can be used for capital purposes only. Small, urbanized area formula funds can be used for both transit capital and operations. Section 5309 Fixed Guideway (FG) funds are also distributed to MPOs on an urbanized area basis. Unlike Section 5307 funds, the 5309 FG funds are generated in large urbanized areas only, and can only be used for capital purposes on fixed guideway transit services such as rail, ferry, and cable-cars. BART is eligible to receive federal formula funds in three urbanized areas: San Francisco-Oakland, Concord and Antioch. In total, the District forecasts the receipt of approximately \$50 million per year from these federal funding sources, representing approximately half of the District's annual renovation funding.

The RTP forecasts a 4% annual growth in federal formula funds for the next 25 years and predicts that roughly 75% of BART's 25 year system reinvestment needs will be funded, largely from federal formula funds. Yet the actual determination and programming of projects with formula funds is done once every three years. This is due to the volatility of the annual appropriation and apportionment process at the national level and can result in projects, which appear to be funded in the RTP, not receiving actual programming when the time comes. So although it may appear most of BART's reinvestment needs will be funded, the year-by-year reality is that BART must continue to compete with other transit operators for limited funding. And the remaining 25% of the District's needs, constituting approximately \$1.4 billion in the RTP, are not funded by either MTC or the counties. These projects, such as station and yard renovation, represent high District priorities yet they simply do not compete well under the region's prioritization process and need to be funded with other sources. As an example, the BART Board recently dedicated \$212 million of BART's share of Proposition 1B funds to the approximately \$400 million Station Modernization Program, since very little other grant funding is anticipated to be available for station work.

MTC developed the Transit Capital Priorities Process, MTC Resolution 3688, in an effort to prioritize the distribution of formula funds. Each project is assigned a score and ranked according to RTP and regional priority. Table A provides a list of these scores by category.

Table A: MTC Transit Capital Priorities Scoring of Projects

Score	Category
16	Revenue Vehicle Replacement/Rehabilitation
16	Fixed Guideway Replacement/Rehabilitation
16	Ferry Replacement/Rehabilitation
16	Fare equipment replacement
16	TransLink
15	Safety
14	ADA/Non-vehicle/Access Improvement
13	Fixed /Heavy/Equipment, Maintenance/Operating Facilities
12	Intermodal Stations
12	Station/Parking Rehabilitation
11	Service Vehicles
10	Tools and Equipment
9	Office Equipment
9	Capitalized Maintenance, including Tires/Tubes/Engines
8	Operational Improvement/Enhancements
8	Expansion

Due to the limited amount of federal formula funds available to the 20 local operators within the region, only the highest scoring projects, Score 16, typically receive funding. In addition, there are annual funding ceilings or caps set on a per project basis to prevent any single operator from receiving a greater share of funding in any given year. Rail car revenue vehicles cannot receive more than \$30 million in formula funds per year. The caps are \$13 million per year for other Score 16 projects, allowing BART to receive a total of \$39 million in federal Section 5307 and Section 5309 Fixed Guideway funds annually (not including local match) for its three critical Score 16 projects: rail replacement and guideway renovation, traction power system renovation, and train control system renovation.

One of the elements that make up the Transit Capital Priorities process is the 10% Flexible Set Aside. In the FY06-08 period, as part of the MTC's Transit Capital Prioritization, transit operators are able to use 10% of overall funding for any lower scoring projects they choose. The distribution of the 10% was derived from a combination of ridership and revenue factors from each operator. This will allow transit operators to fund projects such as facilities that are not normally funded through the federal funded program. For BART, the "flexible funds" will total approximately \$5 million per year. In the near term, the District will use these funds for Preventive Maintenance activities such as a Strategic Maintenance Program.

FTA Section 5309 New Starts funds are discretionary and appropriated by Congress annually. Eligible uses are new rail systems and line extensions. Historically, the BART to San Francisco Airport Extension received \$750 million in New Starts funds over more than a 10- year period. These funds are highly competitive at the national level and MTC's RTEP dictates the next priority within the region.

The District also receives federal funds from Surface Transportation Program (STP) and Congestion Mitigation and Air Quality (CMAQ) funds. STP funds are considered "flexible" meaning they can be spent on mass transit, roads, highways, pedestrian, bicycle and intermodal facilities. They are programmed by MTC on a 2 or 3 year cycle, administered by Federal Highway Administration and flow to the District through FTA formula grants. CMAQ funds must be spent on projects that improve air quality and reduce traffic congestion. They are programmed by MTC, and like STP funds, flow to the District through FTA formula grants. Historically, these funds have been used to fund the District's car renovation projects.

Per MTC's RTP policy to distribute STP and CMAQ funds to those operators within the region with a transit capital shortfall in the RTP, 80% of second and third cycle STP funds have been set aside in a "sinking fund" to cover BART's future fleet replacement program. This amounts to a total of \$90 million over four years, and required the establishment of a reserve account and a swap with BART operating funds, since STP funds expire within 3 years and the fleet replacement program is scheduled to begin in 2013.

State Funding

State funds consist of state gas tax and sales tax on gas, are programmed in the State Transportation Improvement Program (STIP), and are administered by the California Transportation Commission (CTC). The STIP is a rolling 5-year document that is updated every 2 years. Programming is through the county's Regional Transportation Improvement Programs (RTIP) and funds are distributed to the counties based on a county share formula. Eligible uses of STIP funds are state highway improvements, local roads, public transit, soundwalls, intermodals, etc. Typically STIP funds are used for expansion projects although the District has been successful in getting STIP funds for general station renovation in Alameda County. Other projects which have received or will receive STIP funds include the Pittsburg/Bay Point Extension, Dublin/Pleasanton Extension, Warm Springs Extension, and the Oakland Airport Connector. Since BART operates in four counties, advocacy for STIP funding is required in each county.

Another source of state funding the District receives is State Transit Assistance (STA) funds. These funds are distributed on both a revenue-based and a populationbased formula, through MTC. The District receives STA population-based funds and distributes it to the transit operators supplying bus feeder service to BART. STA

revenue-based funds are used for operating budget purposes and can vary from \$2-15 million in any given year.

Local Funding (Bridge Tolls)

AB664 Bridge Tolls

Assembly Bill 664 designated MTC to allocate certain bridge tolls for projects that relieve congestion on the Southern Bridges (Bay Bridge, San Mateo Bridge, Dumbarton Bridge). These funds are split 70% East Bay and 30% West Bay. MTC Resolution No. 2004 gives first priority to match federal and state funds for transit capital projects in score order. AB664 bridge tolls are primarily used to match federal formula grants. BART typically receives from \$2-5 million annually to match these grants and must provide the balance of matching funds from District revenues.

Regional Measure 1 Bridge Tolls

Regional Measure 1 (RM1) bridge tolls are the \$1 bridge toll increase approved in 1989, most of which goes into a Rail Reserve for transit projects that relieve congestion in the northern and southern bridge corridors. This Reserve is split 70% East Bay and 30% West Bay. Historically, BART's extensions program has benefited through a commitment of almost \$110 million in RM1 funds that dates to 1991. Future BART extensions scheduled to receive RM1 funds in the RTEP are the Oakland Airport Connector and eBART.

Regional Measure 2 Bridge Tolls

In March 2004, Bay Area voters passed Regional Measure 2 (RM2) raising the toll on the seven State-owned toll bridges in the San Francisco Bay Area from \$2 to \$3. This extra dollar is intended to fund various transportation projects within the region that have been determined to reduce congestion or to make improvements to travel in the toll bridge corridors, as identified in SB 916 (Chapter 715, Statutes of 2004). Specifically, RM2 establishes the Regional Traffic Relief Plan and identifies specific transit operating assistance and capital projects and programs eligible to receive RM2 funding. The Plan provides approximately \$1.5 billion towards 36 capital projects in the region. BART capital projects receiving funding from this source include: seismic retrofit of the Transbay Tube, the Oakland Airport Connector, the Warm Springs Extension, a Central Contra Costa BART track crossover project, eBART (the rail extension to East Contra Costa County), and a BART/Muni direct connection at Embarcadero and Civic Center/U.N. Plaza Stations.

Local Funding (County Sales Tax Measures)

At the local level, in Fall 2000, the Bay Area voters in Alameda County passed Measure B. Among many other non-BART uses, this transportation sales tax

provides operating dollars for BART Paratransit ADA service, and substantial capital dollars for BART's Oakland Airport Connector and Warm Springs Extension.

Contra Costa County's existing transportation sales tax measure, Measure C is set to expire in 2008. In November 2004, Contra Costa County voters approved a new measure, Measure J, which will take effect in 2009. This new measure is projected to generate \$1.6 billion over 25 years. BART is expected to receive funding from Measure J for two capital projects. One of the projects is eBART/East Contra Costa Rail Extension that is projected to receive \$150 million in 2004 dollars. The second project is the BART Parking, Access and Other Improvements project, which is projected to receive \$41 million.

In November 2003, the San Francisco County Transportation Authority was able to successfully secure a long-term transportation funding revenue stream with the passage of Proposition K. This transportation sales tax is projected to generate between \$2.3 and \$2.8 billion over its 30-year life. The Proposition K expenditure plan includes funding for the District's 24th and 16th Street NE Plaza Redesign Projects, as well as the Balboa Park Station Expansion project. Also included are various bicycle, pedestrian, and intermodal access projects and projects intended to increase the efficiency of the existing infrastructure's capacity through signage and real time travel information. New capacity will be created through such Proposition K funded projects as facilitation of connections between transit modes.

In November 2000, Santa Clara County voters passed Measure A, designed to fund transit service and a future extension of BART to San Jose. An agreement was reached between VTA and BART in November 2001 as to the relationship between the two organizations for the duration of the planning, building and operating of a future BART line to San Jose.

Local Sources (Internally Generated BART Capital Funding)

Throughout BART's history of self-help funding, the District's general revenue has been the funding source. Self-help funding is necessary both for capital projects that do not score well in the MTC's Transit Capital Priority process, and for additional local match where the amount of local match bridge toll funds provided by MTC is inadequate. The District has funded projects both through annual capital allocations and from the proceeds of bonds issued by the District. The District pays the debt service of these bonds from its general revenue. The SRTP/CIP identifies \$52 to \$67 million a year from general revenue to pay debt service, and annual capital allocations of about \$20 million each year.

BART Sales Tax Revenue Bond Issues

BART has the ability to sell bonds backed by the sales tax revenues described earlier in the Debt Service and Allocations section of the SRTP. While sales tax revenue bonds provided a significant amount of BART's self-help portion of the original systemwide renovation program in the late 1990s through the early 2000s, no future such bonds are anticipated in the timeframe of this SRTP/CIP.

General Obligation Bonds

General Obligation (G.O.) bonds are supported by a District-wide, voter approved ad valorem property tax. Prior to the \$980 million Earthquake Safety Program bond, G.O. bonds were used to finance the construction of the original BART system. Approval from at least two-thirds of the voters within the District is required to approve the sale and issuance of the G.O. bonds and assume the burden of the additional property tax necessary to pay off the bonds over several years.

Additions to BART Long-Term Debt for capital projects since the FY06 update include:

- In May 2005, the District issued the G. O. bonds, Series A with a principal amount of \$100 million. This issue constitutes a portion of the total authorized amount of \$980 million of G.O. bonds as approved by voters in the 2004 ballot measure (Measure AA). The proceeds will be used to finance earthquake safety improvements to the District facilities and structures.
- In June 2006, the District issued bonds with a principal amount of \$64,915,000. The proceeds are to be used for the construction of a new West Dublin/Pleasanton Station and related improvements. The bonds will be repaid by revenues generated from this station.

Allocations from the Operating Budget

In addition to the bond issues, the funding program has for several years included direct allocations from the operating budget to the capital program.

Board actions have emphasized the importance of capital allocations so that the District can continue to provide a safe and reliable service to the Bay Area for generations to come. Another important use of operating allocations is for the required "local match" portion of any federal grant that the District receives for its system reinvestment capital projects. Without the provision of the local matching funds, the District would not be able to receive these federal funds.

The FY08 SRTP/CIP forecasts operating allocations of just under \$200 million for capital renovation projects and local match to grants for the period FY08 through FY17. With the inclusion of an operating allocation to capital in the amount of \$50 million over FY10-13 to the Earthquake Safety Program, the total program of

allocations from operating sources to capital is approximately \$250 million over the period FY08 through FY17.

In 2007, BART was awarded a Caltrans grant to analyze the effectiveness of BART Transportation Demand Management (TDM) strategies to manage peak period ridership, encourage off-peak ridership and potentially to generate revenues to fund capital needs. Analysis of identified strategies, such as fares, access and land use, will provide a foundation for a TDM discussion within BART. The study is expected to be completed by Fall 2008.

Project Funding Status

The two major BART CIP categories of funding status are:

- **Track One:** Fiscally constrained funded projects i.e. projects for which potential sources of funding can be reasonably certain within the twenty-five CIP timeframe. For this FY08 CIP, some assumptions regarding Track One grant funding have been made. Though the assumptions made can be considered reasonable, formal actions to secure the funding by a funding agency may not have occurred.
- **Track Two:** Unconstrained funded projects i.e. projects for which funding is not yet reasonably certain. Included in Track Two are projects identified as necessary over the twenty-five year horizon of the FY08 CIP. Delivery of these projects remains dependent on the generation of additional external and internal funding.
- Funding "Commitment" Definition: This type of funding represents funds that have been either programmed in a Transportation Improvement Program (TIP) or State Transportation Improvement Program (STIP). MTC's revenue forecast from the 25-year RTP is not used since the funds have not yet been secured.

The total amounts, including Track 1 and Track 2 projects, shown in thousands of dollars for each CIP Program Area, are as follows:

FY08 CIP Program	Track 1	Track 2	Total
System Reinvestment	\$2,251,034	\$3,254,870	\$5,505,904
Earthquake Safety Program	\$1,318,000	\$ -0-	\$1,318,000
Security	\$47,126	\$211,130	\$258,256
Safety	\$20,625	\$ -0-	\$20,625
Service and Capacity Enhancement	\$177,144	\$2,370,000	\$2,547,144
System Expansion	\$1,774,430	\$ -0-	\$1,774,430
TOTAL CAPITAL NEEDS	\$5,588,359	\$5,836,000	\$11,424,359
TOTAL FUNDING SOURCES	\$5,588,359	- 0 -	\$5,588,359
TOTAL SHORTFALL	- 0 -	\$5,836,000	\$5,836,000

Capital Program Areas

Capital improvements are addressed within the following specific program areas. These program areas are:

- System Reinvestment
- Earthquake Safety
- Security and Safety
- Service and Capacity Enhancement
- System Expansion

Each of these program areas is discussed in more detail in the following sections.

5.2 System Reinvestment Program

The System Reinvestment Program consists of numerous infrastructure renovation and replacement projects. These projects will directly improve the transit experience of BART riders and will move riders more quickly through the BART system. The following is an illustrative list of the System Reinvestment subprograms with an example project that would fall under that category: Rolling Stock (car renovation); Mainline (worn rail replacement and guideway renovation); Stations (general station renovation); Controls & Communications (train control system renovation); Facilities (train washer replacement); and Work Equipment (non-revenue vehicle replacement, e.g. rail grinders).

The current program will focus on renovation or replacement of many basic train systems, including traction power, train control, guideway and the related elements of these systems.

In addition to the systems above, the reinvestment program also includes the phased renovation or replacement of the entire fleet of BART's revenue vehicles. The estimated total cost of fleet replacement, in 2006 dollars, is \$2.1 billion. While the program details and funding have not been fully defined, staff has engaged MTC to begin identifying and securing the initial funding necessary to begin this program.

Controls and Communications

<u>Train Control System</u>: The mainline Train Control System (TCS) has benefited from recent reinvestment by replacing original subsystems of SORS (Sequential Occupancy Release System), ATO (Automatic Train Operations), and an ongoing program to replace the relay based interlocking equipment with microprocessor equipment. However, the underlying original track circuit and speed control system is beyond its expected life of 30 years. This essential, safety-critical system is identified for replacement within the next six years.

Vehicle Automatic Train Control (VATC) receives critical speed commands from the wayside equipment controlling train speed and stopping. This system was developed by in-house staff and has been modified several times over its life. The equipment is beyond its useful life and re-engineering work has begun to bring it to current standards and to improve its performance.

Communications: The backbone of the supervisory and control systems is the operation communication network. It consists of fiber optic cable plant and computer systems that control and route all commands to the field from the Operations Control Center. These computers, which are located throughout

the system, have a limited service life of 15 years. The CIP addresses the replacement of these essential processors.

Replacement of the radio system will be necessary within the next ten years. This system is essential for safe train operation, communications between central operations and wayside, and for BART police.

Mainline

Traction Power System: The Traction Power System (TPS) consists of over 700 high voltage circuit breakers and switchgear, 114 transformer-rectifiers, and over 3 million linear feet of cabling, most of which will be at or exceed its life expectancy within the next 10 years. The capital value of the TPS in today's dollars is over \$400 million. The CIP begins to address this critical system need by staging a reinvestment program to repair and replace this equipment.

Wayside Facility Infrastructure: Renovation of the physical plant including: rail and tie replacement, ventilation fan and street grating renovation, and other wayside facilities that will require repair and renovation.

Stations

Station Renovation: Each year the District allocates approximately \$5 million of BART revenues for general station renovation work in order to address needs critical to keeping the stations in a state of good repair. This work typically includes the relamping of stations and parking facilities, reroofing of station roofs, replacement of sidewalks and resurfacing of parking lots, etc.

Station Modernization: The Station Modernization Program consists of a comprehensive program of projects to renovate and improve the District's core system stations. The program is estimated to cost \$420 million (in 2007) dollars). It was made possible by the Board's direction of over \$200 million of Proposition 1B bond funds as a "down payment" on the total cost. The program is presently under development and will include elevator/escalator rehabilitation, access improvements, structural and architectural repairs, life/safety improvements, and other improvements designed to enhance station environment.

Rolling Stock

Revenue Vehicle Replacement: In addition to structural, mechanical and power related renovation projects, a discussion of when to renovate or replace train cars is underway. Specifically, the C-1 Cars will be coming to the end of their design life in the middle years of this document's ten-year time frame,

approximately FY11. The A and B Cars will also be coming to the end of their design life starting in FY15 and continuing on through FY20. Internal discussions are underway as part of the update of the Fleet Management Plan (described briefly in Chapter 1 of this document) as to the District's preferred strategy for maintaining the major car systems and increasing the reliability of the District's entire fleet.

The District is presently evaluating options for mid-life renovation and an enhanced scheduled maintenance program that could extend the lifespan of cars and would allow for a coordinated replacement cycle for the entire BART fleet. A phased car retirement program might begin with the end of useful life of the A/B Car Fleet, in FY15, or earlier. The replacement of all cars at once may enable the District to realize savings from economies of scale, especially if combined with a VTA car purchase for the proposed San Jose BART Extension, and would allow the District to explore the purchase of different car types. Full funding programs for either a C-1 Car Replacement or C-1 Car Renovation strategy have not yet been developed. Until the update of the Fleet Management Plan is complete, this document continues to carry a placeholder project for C-1 Car Replacement.

Earthquake Safety Program 5.3

The Earthquake Safety Program (ESP) is a top priority for successful completion by the District. The original BART system was designed to withstand much greater seismic stress than required by construction standards of the time. The 1989 Loma Prieta earthquake provided a significant test of that design. BART was back in service just hours after the event, while many other Bay Area road bridges, freeways, and other structures suffered major damage. With the Bay Bridge out of service, BART served as a vital link between San Francisco and the East Bay following the earthquake. However, the epicenter of the Loma Prieta earthquake was 60 miles distant from most of the BART system. BART faces earthquake risk from several major fault lines in the immediate vicinity of BART rail lines.

Earthquake Safety Program Implementation

BART plans to implement the ESP in three stages, with Caltrans Local Seismic Safety Retrofit Program (see below for description) elements interspersed throughout the overall Program. First, BART will retrofit the Transbay Tube, a crucial element of the system. Next, priority will shift to the portion of the system from the west portal of the Berkeley Hills Tunnel to Montgomery Station. Together, these two elements will create an operable segment, which can provide transbay service quickly following a major earthquake. In September 2002, BART received a California Environmental Quality Act (CEQA) exemption from the California State

Legislature for the retrofit of that portion of the system between the Berkeley Hills Tunnel and Montgomery Station, and, in October 2005, subsequently received a similar CEQA exemption for the balance of the program. Finally, BART will retrofit additional trackway structures, stations, systems, administrative, operations and maintenance facilities, as funding permits.

Seismic Vulnerability Study

Preceding the implementation of the Earthquake Safety Program, a comprehensive Seismic Vulnerability Study, was presented to the Board in 2002. That study provides the underpinnings for the ESP. The Seismic Vulnerability Study evaluated the risk from a major Bay Area earthquake at a nearby fault and identified retrofit strategies to enable the core system to withstand such a major earthquake.

The "Systemwide Safety, Core System Operability" program will retrofit the 71-mile original BART system to withstand a major Bay Area earthquake. The retrofits performed under this program will improve the safety of the Transbay Tube, aerial and other track structures, stations, maintenance facilities and other structures and will facilitate a rapid return to service in the core system only, spanning from the west portal of the Berkeley Hills Tunnel to the Daly City Yard.

Project Funding

The project will be funded from a number of different sources. All funding sources have been secured. Funding by source is shown below.

Total Estimated Project Expenditures by Funding Source **Current Projection (\$M)**

LSSRP (Local Seismic Street Retrofit Program)	\$	134
RM2	\$	143
GO Bond	\$	980
Misc BART	<u>\$</u>	<u>50</u>
Total Estimated Project Expenditure	<u>\$</u>	1,307

The Local Seismic Safety Retrofit Program (LSSRP) funds represent the Highway Bridge Replacement and Rehabilitation funds based on preliminary cost estimates attributable to the seismic retrofit of locally owned bridges crossing over city or county owned roadways. There is a Memorandum of Understanding which indicates that approximately \$150 million in federal and state funds may be required as part of this program. The current projection of \$134 million reflects the loss of some state match at the time of the bond measure. Should state match

become available, the project could incur state match funds, which may increase the current projection of LSSRP funding.

Regional Measure 2 is funded by local bridge tolls and allocated by the Metropolitan Transportation Commission. Should funding not be allocated timely, general obligation bond funds would temporarily fill the gap and be backfilled at a later date.

G.O. Bond is a general obligation bond, which was approved in November 2004 funded by property taxes. It is anticipated that the bonds would be issued in three traunches by BART's controller/treasurer.

Miscellaneous BART funds are future anticipated funds to the Program from ridership revenues or future additional fund sources.

5.4 **Security Program**

Since the events of September 2001, the District has continued to enhance its security and safety activities. The BART security program is comprehensive in nature, covering various operating and capital programs. Education programs to heighten employee and customer awareness of potential suspicious activities within the BART system, emergency response drills, and installation of additional monitoring systems are examples of such programs. Though the bulk of the activities are transparent to the public eye, the more visible elements include the use of police and trained dogs to randomly inspect trains, stations and facilities.

Detailed security project descriptions are not made available through this public document, to avoid compromising the safety of the District's systems. Categorical security projects within the capital program include the following: Surveillance (unpatrolled areas, rail revenue vehicles, and rail stations), Locks and Alarms (unpatrolled areas, rail stations, and other facilities), Structural Augmentation (stations and non-station), Emergency Communications and Operations, Detection Systems (chemical, biological and explosives), and Preparedness (citizen training, emergency warning information, emergency response supplies). BART's overall security program needs are expected to cost over \$250 million in capital costs, with operational costs estimated at \$8.5 million annually. Those operational costs are not currently included in the District's operating financial outlook. Forty-one million, or approximately 16% of the \$250 million has been identified as committed funding in Track One. However, the bulk of the remaining Security Program capital projects do not have identified funding, estimated at \$211 million.

Funding Developments

Grant funding for the District's security projects come from a multitude of federal and state sources. The District has had some success in receiving various security grant funds since 2002 for use towards the security programs. Through FY06, the District had been awarded capital and operating funds totaling \$22 million in the form of US Department of Justice grants, FTA Safety & Security grants, State Homeland Security grants, and Urban Areas Security Initiatives Metro Rail Transit grants. Efforts to gather additional funding for security projects are ongoing.

Despite the increasing need for security funds for the nation transit systems, the Homeland Security measure provided only \$150 million for security grants nationwide in FY06 of which only \$10.5 million (7%) was allocated to the San Francisco Bay Area Rail and Bus operators. In FY07, the total amount allocated nationwide was \$175 million and the SF Bay Area share was \$13.8 million (8%).

Members of Congress representing urban and suburban districts have been advocating since September 11, 2001 that homeland security funds be allocated to those areas of the country more prone to terrorist attacks. This risk-based funding could mean higher funding levels than in previous years for the urbanized areas of San Francisco and Oakland, which will hopefully benefit the region and its transit operators.

In November 2006, the voters of California approved Proposition 1B which provided the authority to issue bonds totaling \$20 billion for a variety of transportation and transit-related programs. These bonds include \$1 billion for mass transit security. The enabling legislation to program these funds is currently being developed. The District expects to receive additional security funds from Prop 1B but the amount has not been finalized at this point.

5.5 Service & Capacity Enhancement Program

This program area includes a variety of elements, including accessibility improvements to better accommodate disabled riders, general access to BART stations through a variety of modes, station area development to attract and accommodate increased ridership, and projects to increase the passenger-carrying capacity of the BART system, including station and line-haul capacity.

Some capital projects have already been implemented to begin addressing capacity enhancement needs, including the installation of additional ticket vending machines and faregates, and expansion of maintenance shop capacity. Another project currently underway is the Pleasant Hill Crossover project, which will be

important to support future service levels. Funding for this project is included in the bridge toll increase measure (RM-2) that was approved on the March 2004 ballot.

The next level of investment is likely to be triggered by the need to accommodate ridership levels between 420,000-500,000 daily riders. Such investment would involve additional improvements such as another track crossover in Richmond, additional shop and yard facilities, improved station access, vertical circulation and platform capacity improvements, and additional transit vehicles.

Beyond daily ridership levels of 500,000 projects that are orders of magnitude larger than those mentioned above would be required. Such projects could include increasing transbay capacity, more cars, new shops and yards, major station expansions, etc.

The recent increase in ridership underscores the importance of this program to meet the expected future demands on the BART system. Despite this, there are few existing external resources to draw upon for badly needed improvements.

5.6 **System Expansion Program**

System expansion represents another major component of the District's capital investment program. Following is a summary of BART system expansion projects.

Warm Springs Extension

The BART Warm Springs Extension (WSX) is an approximately 5.4 mile extension of BART's existing Fremont line to a terminal station in Warm Springs, with an optional station in Irvington. This extension will begin at the Fremont BART station and extend south, descending into a subway beneath Fremont Central Park, under a cove on the eastern edge of Lake Elizabeth and an operating Union Pacific Railroad (UPRR) track on the east edge of the park. Thereafter the BART doubletrackway will rise and run at grade adjacent to the UPRR track, through the Irvington District, to the Warm Springs Station site south of Grimmer Boulevard in the Warm Springs District of Fremont. The optional Irvington Station will be constructed when independent funding is provided by the City of Fremont. An Environmental Impact Report (EIR) for WSX was originally certified by the BART Board in 1991. A Supplemental Environmental Impact Report (SEIR) for the project was certified in June of 2003. An Environmental Impact Statement (EIS) was approved in October of 2006 when FTA signed its Record of Decision for the project.

Project costs are currently estimated at \$747 million in 2007 dollars. The project has been included, with a full funding plan, in the 2004 update to the Alameda County Congestion Management Agency's (CMA) Countywide Transportation Plan, as well as MTC's T2030. Funding partners include ACTIA, MTC (RM1, RM2 & Prop B), ACCMA, and the California Transportation Commission (CTC) and Caltrans (TCRP and STIP).

In the spring of 2006, ACTIA established a WSX Policy Advisory Committee (PAC) to address issues associated with project funding and implementation. The WSX PAC consists of representatives from ACTIA, MTC, ACCMA, the City of Fremont, VTA and BART. In March of 2007 the WSX PAC endorsed a plan designed to minimize the effect of escalation on the project, which is estimated to add approximately \$36M per year to its capital cost. The plan calls for moving forward immediately with the detailed design of the subway portion of the project and advertising a contract for its construction in the spring/summer of 2008, funding permitting. The plan also calls for completing preliminary design of all remaining portions of the project and advertising a design-build contract for this work in the spring of 2009, funding permitting.

East Contra Costa BART Extension (eBART)

The proposed East Contra Costa BART Extension, or eBART, would provide rail service eastward from the Pittsburg/Bay Point BART Station to the communities of Pittsburg, Antioch, Oakley, Brentwood and Byron/Discovery Bay. The environmental study for the project will consider several alternatives, including a diesel-multiple unit (DMU) train, bus rapid transit, classic BART and no project. The current Phase 1 Preferred Alignment is in the median of State Route 4. This Phase 1 project will service the communities of Pittsburgh and Antioch with a transfer platform at Pittsburgh/Baypoint and stations at Railroad Avenue and Hillcrest Avenue. The Phase 1 project is estimated to cost \$481 million. All elements of the project are dependent on funding.

The eBART project is currently in the project development phase. underway is the environmental review, preliminary engineering, support of cities on work at the stations to increase ridership, and community outreach. The project development phase estimated completion is in December 2008.

Oakland Airport Connector (OAC)

Since the early 1970s the concept of an improved transit link between the Oakland International Airport and the BART system has been explored, and various feasibility, engineering and environmental studies have been undertaken. The need for the Oakland Airport Connector (OAC) Project is underscored by the recognition that existing transportation is constrained and complicated by the ever-increasing congestion along roadways that serve the area. The airport continues to grow at

better than expected levels, bringing more traffic to the area. Future development in the area –both public and private—will add further congestion to the corridor.

Project Description

The project includes an alignment that is largely in the Hegenberger Road corridor, running on an aerial guideway between the Coliseum BART station and Doolittle Drive. The guideway passes under Doolittle Drive then runs at grade adjacent to Airport Drive. In the airport terminal area the guideway again becomes aerial, over the airport parking area, terminating in front of the existing Terminals 1 and 2. A walkway will carry passengers across the airport ring road and allow them to descend to the ground level immediately between the two terminals. The alignment is designed to accommodate a potential future intermediate station at Doolittle Drive.

Development of the Public-Private Concept

Between 2002 and 2004 BART completed the necessary pre-bid activities, including design-build project procurement documents, pre-qualified design-build teams, started the right-of-way acquisition process, and began utility relocation work. However, due to the economic climate, it became apparent that approximately \$100 million in anticipated funding was unlikely to become available anytime in the next several years, and that allocated public funds would not be sufficient to cover the capital costs of constructing the Project. As the Project delays continued, costs continued to escalate.

In an effort to close the funding gap, BART investigated the introduction of private sector funding to augment the existing public funding sources, under the provisions of the California Infrastructure Finance Act (IFA). Enacted by California Assembly Bill 2660 (AB 2660), the IFA authorizes local governmental agencies to enter into an agreement with a private entity for the design, financing, construction, maintenance operation and lease of a revenue-generating project.

Feasibility studies found the projected OAC ridership could generate sufficient revenue to attract private investment. A wide range of investors were polled and BART found there was interest to design, build, finance and operate (DBFO) the OAC. Under a scenario in which BART contributes a portion of the public funding towards the capital cost (approximately \$170M, or roughly 50%), the balance of the funding needed (\$170M) would be raised by a successful Project Company in exchange for a long-term concession agreement (35 years). During that time, the Project Company will be reimbursed its capital investment and operation and maintenance costs, along with a reasonable return on its investment.

BART issued a new Request for Qualification (RFQ) to interested parties in February 2006, and in May 2006 received responses from five highly qualified teams made up of consortiums of contractors, vehicle providers, transit system operators and international financiers. In September 2006, three teams were shortlisted for selection.

Moving Forward

In May 2007, BART released the request for proposal (RFP) to the pre-qualified teams and expects to receive responses later this year. The OAC Project is now poised to be the first of its kind in the U.S. transit industry to use this type of PPP approach. If all goes well, the contract should be successfully awarded by the end of 2007. Construction work on the Hegenberger corridor could be underway in 2008 and the Oakland Airport Connector could be carrying passengers to and from the Oakland Airport by 2011.

The 3.2-mile connector is expected to enhance schedule reliability over the AirBART shuttle, reduce trip times and provide a seamless connection with the BART system. With a travel time of less than 10 minutes between the Coliseum BART Station and the airport, and vehicles departing every few minutes, the OAC is expected to carry approximately 10,000 daily passengers, or approximately 15% of all of the passengers traveling to and from the Oakland Airport by 2020.

The total project budget is approximately \$434 million (in 2007 dollars). The entire project has been and will be a collaborative partnership between BART and it's funding agencies including; the Alameda County Transportation Improvement Authority (ACTIA), the Alameda County Congestion Management Agency (ACCMA), the California Transportation Commission (CTC), the California Department of Transportation (Caltrans), the City of Oakland and the Port of Oakland, and the yet-to-be selected private partner.

West Dublin/ Pleasanton Station

As construction of this new infill station gets underway, BART is continuing to work with the master developer, West Dublin/Pleasanton Station Venture, LLC (formerly ORIX Real Estate Equities, Inc.). The master developer has two members, Ampelon Development Group LLC and Jones Lang LaSalle Americas, Inc., working on the development of the construction of the West Dublin/Pleasanton BART Station in the median of I-580 and the requisite ancillary transit facilities. The mixed-use project, which will surround the station on either side of the freeway, will include residential, hotel, office and parking. The private development components will be constructed by Windstar, a third party developer. BART has secured \$87.5 million to date in grant and internal funding for the project. \$4 million came from the Tri-Valley Transportation Council (TVTC) in FY04 and \$10 million came via Alameda County Congestion Management Agency (ACCMA). The station and public infrastructure project costs were updated to \$84 million in 2007 dollars. The project is contained in Track 1 of the RTP, Tier 1 of the ACCMA Countywide

Transportation Plan, and Track 2 of the expenditure plan for the adopted renewal of Alameda County's Measure B.

In addition to the grant sources described above, the public portion of the overall project will be paid for by the proceeds of a bond issue and prepaid ground lease revenues for the development sites. Repayment of the bonds is proposed from a combination of private funds and from BART revenues generated by the station and other potential ancillary revenues. Additionally, reserve funds to cover any shortfalls in debt service and operating costs for the first five years of operation will be provided by the Cities of Dublin and Pleasanton, as well as Alameda County. The Environmental Impact Report for the West Dublin/Pleasanton Infill Station and Transit Village was certified by the BART Board in April 2001. Current projected opening date for this project is in FY09.

Silicon Valley Rapid Transit Project (San Jose Extension)

The BART Extension to Santa Clara County would extend 16 miles of double track from the proposed Warm Springs Station in southern Fremont to downtown San Jose, terminating adjacent to the Santa Clara Caltrain Station. With significant political support from Santa Clara County, the project was the recipient of a \$725 million earmark in the Governor's 2000 TCRP. Subsequent to the State commitment, Santa Clara County voters approved a sweeping transportation tax measure that promised an additional \$2 billion toward the BART extension. The BART/VTA Comprehensive Agreement, adopted in 2001, addressed a multitude of financial, operational and policy issues that may arise as part of developing and operating a BART extension into Santa Clara County. An example of the comprehensive nature of the agreement is the understanding that the core system impacts of the Silicon Valley Rapid Transit project will be assessed and covered in the cost of the project. Impacts of this proposed extension to existing BART stations and to various BART core systems (traction power, train control, communications, ventilation, yards and shops) are being analyzed and reported. VTA is providing the funding support for all BART costs related to support work for the Silicon Valley Rapid Transit project. BART and VTA will continue to work towards the completion of the proposed BART to Santa Clara County Extension, with VTA taking the lead in financing and completing the project planning, design and construction.

SVRT Project -BART Core Improvement Studies

In 2003, BART completed a high level evaluation of the improvements required for BART stations and systems due to the Silicon Valley Rapid Transit (SVRT) Corridor extension. At present, the 2003 analysis requires updating to reflect a forecasted increase in SVRT ridership, changes in the proposed service plans and to advance the analysis to a further stage of readiness. The studies are now known as the BART SVRT Core Improvement Study, one to be performed for stations and another for systems. Besides analyzing the capital improvements needed to existing BART

stations, the Stations Study also includes a systemwide access survey, access improvements and operational tools for addressing station capacity. The Systems Study will examine the capital improvements for traction power, train control, Central/Integrated Control System, yards, shops and ventilation required as a result of integrating the SVRT Project into the BART system. A master schedule for implementing these improvements will be developed for the Stations and Systems Studies.

Regional Rail Plan

Bay Area voters in 2004 passed Regional Measure 2, raising the toll by \$1 on the region's seven state-owned toll bridges to pay for various transportation projects that will reduce congestion and improve travel in the bridge corridors. Regional Measure 2 also requires MTC to adopt a Regional Rail Plan. As stipulated in the Streets and Highways Code Section 30914.5 (f), the Regional Rail Plan will define the passenger rail transportation network for the nine-county San Francisco Bay Area, including an evaluation of California high-speed rail access options that work for our region. In order to meet the goal of developing the Regional Rail Plan, a project management team was formed comprising MTC, BART, Caltrain, and the California High Speed Rail Agency (CHSR).

The Regional Rail Plan will identify and formulate strategies to:

- Integrate passenger rail systems
- Improve interfaces with connecting services
- Expand the regional rapid transit network
- Plan capacity improvements on the regional railroad system
- Coordinate regional rail investments with transit-supportive land uses
- Study potential Bay Area alignments for the California High Speed Rail System.

APPENDIX A: LIST OF ACRONYMS

ACCMA Alameda County Congestion Management Agency
ACTA/ACTIA Alameda County Transportation Authority/Alameda

County Transportation Improvement Authority

ADA Americans With Disabilities Act
ATO Automatic Train Operations
BAP Business Advancement Plan

BART (San Francisco) Bay Area Rapid Transit District

BPA Bonneville Power Administration

Caltrans California Department of Transportation

CAPRA Capital Reserve Account

CBTP Community-Based Transportation Plan
CEQA California Environmental Quality Act
CHSR California High Speed Rail System
CIP (BART) Capital Improvement Program

CMA Congestion Management Agency
CMAQ Congestion Mitigation and Air Quality

CPI Consumer Price Index

CTC California Transportation Commission

DAS Data Acquisition System

DBFO Design, build, finance and operate

DMU Diesel Multiple Unit

eBART East Contra Costa BART Extension EBPC East Bay Paratransit Consortium

ESP Earthquake Safety Program

EIR(S) Environmental Impact Report (Statement)

FG Fixed guideway

FMP Fleet Management Plan

FTA Federal Transit Administration

FY Fiscal Year (July 1 - June 30 for BART)
GASB Government Accounting Standard Board

G.O. Bond General Obligation Bond

IFA California Infrastructure Finance Act LSSRP Local Seismic Street Retrofit Program

MOU Memorandum of Understanding

MPO Metropolitan Planning Organization

MTC Metropolitan Transportation Commission

Muni (San Francisco) Municipal Railway NCPA Northern California Power Agency

OAC Oakland Airport Connector OCC Operations Control Center

OPEB Other Post-Employment Benefits

PAC Policy Advisory Committee Pacific Gas and Electric PG&E **RFP** Request for Proposals

RFQ Request for Qualifications

RMRegional Measure

RTIP Regional Transportation Improvement Programs

RTP (MTC) Regional Transportation Plan RTEP (MTC) Regional Transit Expansion Plan

SamTrans San Mateo County Transit District

SEIR Supplemental Environmental Impact Report

SFO San Francisco International Airport SMP(BART) Strategic Maintenance Program

SORS Sequential Occupancy Release System

SRTP (BART) Short Range Transit Plan

SSR Station Status Report

STA (California) State Transportation Assistance STIP State Transportation Improvement Program

STP Surface Transportation Program **SVRT** Silicon Valley Rapid Transit

TCRP (California) Traffic Congestion Relief Program

TCS Train Control System

TDA (California) Transportation Development Act

TIP Transportation Improvement Program

TLC Transportation for Livable Communities (MTC)

TOD Transit-Oriented Development

TPS Traction Power System

TVTC Tri-Valley Transportation Council

UPRR Union Pacific Railroad

USDOT United States Department of Transportation

VATC Vehicle Automatic Train Control

VTA Santa Clara Valley Transportation Authority

WSX (BART) Warm Springs Extension

APPENDIX B: STATION PLANNING, ACCESS, AND TRANSIT-ORIENTED DEVELOPMENT REPORT

1. Introduction

BART pays great attention to its stations. To some degree, every station is a "work in progress." Station-related activities include station planning, station access, and transit-oriented development. The following sections provide information on the activities related to station planning, access, and TOD.

Station Planning 2.

Comprehensive Station Plans and Capacity Plans

The purpose of the Comprehensive Station Plan (CSP) process is to coordinate station capacity planning, station access investments and transitoriented development activities. The first round of CSPs was completed in FY03 for Balboa Park, Pleasant Hill, and Union City. A second round of CSPs was completed during FY05 at six stations: Bay Fair, El Cerrito del Norte, Embarcadero, Richmond, 16th Street, and Walnut Creek. A key input to a CSP, Station Capacity Technical Memo(s), were prepared in 2006: Berkeley, Daly City, El Cerrito Plaza, Glen Park, MacArthur, and Powell.

Station-related capacity projects can be divided into systemwide and station specific. An example of a systemwide station capacity project is AFC Expansion. An example of a station-specific capacity project is the Phase One Expansion of the Balboa Park Station. BART work on Station Capacity Plans has progressed, along with the other elements of the System Capacity Study. Station Capacity Plans build on the format created through the CSP process, focusing solely on the issue of capacity. The impacts to the existing BART stations of the construction of a Silicon Valley Rapid Transit (SVRT) BART extension were also considered.

The results of the initial phase of the station capacity planning process, titled "VTA Impacts on BART Core System Stations: Phase 1 Preliminary Study", were compiled in 2003. Cost estimates for capital improvements at each station, including breakdowns of impacts from future VTA ridership, were identified.

For the Phase 1 Study, a model was created for each of four prototype stations: Downtown Subway (Embarcadero), Neighborhood Subway (Balboa Park), Aerial Center Platform (Bay Fair) and Aerial Side Platform (Walnut

Creek). Criteria regarding safety and passenger service levels were developed and then applied to each of the station prototypes to determine the capacity of the station's platforms, vertical circulation (stairs/escalators), and fare gates. A follow-up Station Capacity Study examined three stations--Ashby, 16th Street Mission, and El Cerrito del Norte-to ensure the accuracy of the cost estimates generated for the Phase 1 Study. In FY06, BART and VTA discussed how to update the 2003 study to reflect the most recent SVRT ridership forecasts.

Additional station capacity work related to inputs of the SVRT project are scheduled to be initiated in FY08 when ridership forecasts are released.

3. **Station Access Improvements**

Station Access Guidelines

The District's Station Access Guidelines map out how BART can optimize access to stations by all modes, with a hierarchy of access modes that puts pedestrians as the first priority. The guidelines are designed to provide a clear framework to assist staff and contractors in designing facilities at both new and existing stations focusing on physical design issues.

The guidelines are also a resource for BART's partners (cities, counties and other transit agencies), suggesting ways in which BART and its partner agencies can work together to provide a "seamless journey" for all BART customers. The intent is that the "seamless journey" should give pedestrians, bicyclists and bus riders a higher priority for getting convenient and enjoyable access to BART stations than those BART riders arriving in a private automobile. The Station Access Guidelines are available upon request from the BART Customer Access Department.

Bicycle Access

The BART Bicycle Access program staff completed a Systemwide Bicycle Parking and Access Plan, presented and distributed to the BART Board in September 2002. The Bicycle Plan includes a list of proposed projects, each in various stages of design and cost development, which have been incorporated into the CIP database as either Track One or Track Two projects, including continuing replacement and expansion of bicycle lockers at stations throughout the District and installation of bicycle signage. The District also operates three attendant bicycle parking facilities which provide secure bicycle parking along with transit and bicycle information, retail bicycle sales and repair.

The District has developed a program to install electronic on-demand bicycle lockers at most of its stations. Funding has been secured to start implementing the program at many stations and additional funding is being sought to complete the program. Electronic on-demand bicycle lockers will be able to serve 3-5 times as many customers and help BART meet the demand for bicycle parking.

The bicycle signs interface with existing station signage and use international standard icons. Signs include way-finding information to clarify bicycle paths to BART stations and help riders make essential decisions at the right moment. As part of the Safe Routes to Transit Grant for Improvements at the MacArthur Station, BART is working with the City of Oakland to develop and test a bicycle pedestrian wayfinding signage program. The District continues to submit grant applications to fund bicycle projects prioritized in the 2002 Bicycle Plan and is working with station area improvement projects to provide better bicycle access and parking.

In general, BART can implement only those bicycle projects for which grant funds have been received. To illustrate, between September 2004 and September 2005, the District submitted more than a dozen grant requests to over six different programming authorities to fund bicycle projects prioritized in the 2002 plan. To date, only one of those requests has resulted in the actual programming of funds. That request, approved in April 2005, was for Alameda County Measure B funds and city-controlled Air District funds for electronic bicycle locker installation at three Alameda County stations.

Auto Access

BART activities in the arena of auto-oriented service and capacity enhancements include innovative facility management and capacity expansion. Since half of BART's parking facilities are at capacity by 8:30 in the morning, innovative programs are currently underway to manage autooriented access demand including programs for Monthly Reserved, Long-Term/Airport, Single-Day Reserved, Criteria Based Daily Paid, as well as several privately operated car sharing programs. Each of these programs is described below. More detailed information about the BART parking programs, including an online application form, can be found on the BART web page at http://www.bart.gov/guide/parking/overview.asp.

The **Monthly Reserved Parking Program** lets passengers purchase guaranteed parking near the entrance to a station. Monthly parking fees vary from station to station within a range of \$30 to \$115.50 based on demand. Some employers provide pre-tax benefits for their employees so they can purchase permits. At East Bay stations, up to 25% of a station's parking spaces can be set aside as monthly reserved spaces. The actual number set

aside is determined by demand. As of May 2007, over 5,600 permits have been sold at the 28 core system stations with parking (the core system is comprised of the 39 stations in the three-county BART District, plus Daly City Station).

Under the Airport/Long-Term, permits are sold for use at each East Bay BART station based on daily commuter parking usage. Those wishing to purchase a permit go to the BART website parking page and indicate their desired East Bay BART station and proposed dates of usage. A computerized reservation program determines whether long-term permits are available at that station for the dates requested. If space is available, the patron prints out a parking permit using his or her printer. The daily cost for the long-term permit is \$5. The modified program allows East Bay BART riders traveling to San Francisco or Oakland airports to park their vehicles for more than 24 hours. Between May 2006 and April 2007, over 61,000 days of long-term parking had been purchased.

The Single-Day Reserved Parking Program is an Internet-based reservation program that allows BART patrons to purchase parking in advance for specific dates. The project is operated in the same fashion as the Long-Term Parking Program described above.

The Criteria-Based Daily Paid Parking Program applies daily fees at stations whose parking are fully occupied three or more days a week and have sold 15% of its parking in monthly reserved parking or where the local government jurisdiction has requested BART to implement parking fees. Stations that have met this criteria and have fees implemented to date include: Lake Merritt, MacArthur, West Oakland, Rockridge, Orinda, Lafayette, Walnut Creek, North Berkeley, Ashby and Dublin/Pleasanton. Stations who have met the criteria and are scheduled to have daily fees implemented by September 15, 2007 include: Fruitvale, El Cerrito Plaza and Fremont.

Privately operated car sharing services are provided at 10 BART Stations (Daly City, Balboa Park, Glen Park, West Oakland, Lake Merritt, MacArthur, Rockridge, Ashby, North Berkeley, and El Cerrito Plaza). Three companies (City Car Share, Flex Car and Zip Car) are provided space for a total of 34 vehicles at these stations in which BART patrons can rent for short trips.

Due to limited funding availability, there are few auto-related capacity expansion projects. Where transit village projects are under development, BART will work with the local jurisdiction and the community to ensure that access improvements, including automobile access, are adequate to meet future access demands.

Signage

The District is actively pursuing programs to enhance informational signage at and around BART stations. The goal is to make access to the stations and to activities surrounding the stations more accommodating to BART patrons, regardless of which mode they use to arrive or leave a station. Funding for the implementation of each of these signage programs is being pursued.

The majority of these signage programs and projects are currently unfunded and may have more future success obtaining funding on a station-by-station or jurisdiction level, rather than as a systemwide program.

A Bicycle Signage design project is also underway, as described previously. The results from that project will be incorporated into the BART signage standards, and grant funds will be sought to install bicycle facility signage at and around BART stations.

In the arena of cyber-information and wayfinding, the Real Time Travel Information Program is intended to provide BART system status, current departure information, delay information and elevator information over the Internet. The program is in the planning stages and is intended to improve media reporting accuracy through consistent and timely information. The program is also intended to improve service to persons with disabilities through elevator service reports and diverting customer call center demand to the BART web page, so that people who do not have Internet connectivity will receive more timely call center service.

System Accessibility and ADA

BART continues to work on improving system accessibility for users with disabilities by implementing ADA guidelines and regulations as well as making some improvements which benefit people with disabilities but which is not required by the ADA. The title "ADA project" is a general title to address a variety of projects in the CIP under individual station names, or on a systemwide basis. Included as ADA projects in the Service and Capacity Enhancements Program are accessible parking and path improvements, ADA compatible signage (for example, raised letter and Braille directional signage), and ADA-related elevator projects. Some ADA projects are listed in the reinvestment section, such as accessible fare collection equipment and platform edge tile replacement.

ADA and other accessibility projects are prioritized on the basis of consultation among BART staff from different operational and capital project departments (the BART Accessibility Cross-Functional Team) as well as consultation with the BART Accessibility Task Force (Board appointed community members).

Transit Connectivity

In the transit or intermodal arena, BART continues to work on coordination with other transit agencies with connecting services to BART stations. These efforts occur not only in the area of service schedules, but also in the area of capital projects, such as intermodal bus facilities. In the recent past, transit centers have been constructed at several BART stations. Current plans to construct new or expanded transit centers are limited by the ability to acquire grant or private funds. Many proposed transit villages currently underway with public funding have intermodal facilities as an eligible use for those funds.

Pedestrian

The Passenger Drop-Off Program encourages the creation of many pedestrian-friendly amenities. Specifically, crosswalks, sidewalks, curb cuts and signage are all elements of a successful pedestrian and customer drop-off infrastructure. At this time, pedestrian projects are pursued on a station-bystation basis, pending the further development of the Pedestrian and Passenger Drop-Off Programs. Where possible, grant funding is being sought for specific project implementation.

Outside of the direct passenger drop-off zone, most of the potential pedestrian improvement projects are within the jurisdiction of a city or county. This necessitates cooperation between the District and local partners. Pedestrian improvements are often undertaken as part of an ongoing community planning or transit-oriented development project.

Art in BART

BART's station art program was established in the 1970s to place works of art in stations to complement the varied station designs. New construction and station enhancement work occurring at stations provides opportunities to incorporate public art into these projects.

The BART Station Access Guidelines finalized in October 2003 included art in stations as an important access element. Also, art and the Art in BART program have been included in BART's Architecture Standards. Both of these documents will help encourage art elements to be included in future capital improvement projects. Proposals submitted by local agencies and community groups are reviewed and consideration is given to appropriateness to site, durability, ease of maintenance as well as the available level of funding.

A significant amount of access planning work will also be initiated related to the SVRT project. This includes a new customer access survey leading to an

updated Passenger Profile Report, and planning to accommodate new station access demands generated by future BART trips going to Santa Clara County.

4. **Transit-Oriented Development**

BART has made planning and building transit-oriented development (TOD) a high priority. By promoting high quality, more intensive development on and near BART-owned properties, the District can increase ridership, support longterm system capacity and generate new revenues. Such development also creates attractive investment opportunities for the private sector and facilitates local economic development.

In 2001 the Board adopted the Station Area Planning Policy to foster local community partnerships for station area planning, to promote the development of comprehensive planning that links station development, access and functionality and to advocate for transit-supportive policies at all levels of government. BART's Transit Oriented Development Guidelines were completed in 2003.

A Joint Development Policy Review Panel was formed in 2004 to comprehensively assess the District's Joint Development Program and its ability to deliver high quality TOD on BART land and to make recommendations that would improve the program's effectiveness and impact. As part of the effort, the panel was asked to review the District's 1984 Joint Development Policy and suggest amendments as appropriate. The panel consisted of the four BART Board members from the Board's Joint Development Liaison Committee and representatives from the Center for Transit-Oriented Development, MTC, ABAG, and the BAAQMD.

The Policy Review Panel met numerous times during 2004 to address issues and questions raised by the BART Board in 2003. The topics addressed generally fell in the following categories: prime joint development goal, station typology, funding for pre-development and development, access requirements, process (station area planning through joint development), and joint development within BART. In late 2004, four stakeholder outreach meetings were conducted to secure additional comment. Participants included developers/lenders, elected officials, funding agencies, and transit access providers.

The major conclusions of the Policy Review Panel included the following:

BART needs to take a more active and strategic role in setting expectations for development at stations in order to maximize

- performance of the system as a whole and to maximize the value of its land.
- BART's land is an asset and needs to be viewed as such. It can be used to create development on BART land, leverage development off BART land, and provide access to BART. Revenue from development on BART land will ultimately have a positive impact on BART's operating budget.
- To fully realize the benefits of development, BART needs to proactively place its real estate assets in a productive mode.
- BART needs to combine development and station access, generate revenue and ridership in both the near and long term, and strategically preserve opportunities for future transit needs.

The Policy Review Panel then made two major program recommendations. First, BART should pursue TOD and not joint development. Joint development is just one component of successful TOD. By looking at just its own property, BART is not maximizing the value of its asset. Therefore, BART should work proactively with cities to plan for development over a larger area around its stations that is both supportive of transit service and maximizes the value of the land.

The second recommendation involved a shift in the approach BART was using to address access improvements to its stations. Developers, cities and funding agencies view BART's application of a 1:1 parking replacement practice as a significant barrier to joint development and TOD. Refining this replacement practice and developing alternative implementation approaches will enhance development opportunities. The Panel concurred with this view, and its second major recommendation was to direct staff to use a new access methodology developed during the Policy Review Panel's efforts to identify the opportunity to adjust replacement parking at specific stations and then consider using ground lease revenues to provide for an access modal mix that optimizes ridership.

The Panel recommended that staff develop a new TOD Policy in keeping with BART's Strategic Plan framework. This policy was drafted, reviewed and then adopted by the BART Board in July 2005.

As of June 2007, BART and its development partners are engaged in activity at 26 of BART's 43 stations. Residential and commercial projects at the Castro Valley, Richmond, Fruitvale, Hayward, and Powell Street stations. Projects at West Dublin/Pleasanton and Pleasant Hill are under construction. Other projects in various stages of development are slated for the Ashby, Coliseum, El Cerrito Plaza, MacArthur, Walnut Creek and West Oakland stations. Additional TOD activity has occurred at Hayward and the

Dublin/Pleasanton stations through property exchanges with the local land use jurisdictions.

In FY05, TOD planning efforts were initiated at or near the South Hayward, Lake Merritt, Dublin/Pleasanton and Daly City BART Stations. BART is working closely with a variety of local jurisdictions, community groups and private development partners to advance such projects. BART is also coordinating efforts with local jurisdictions and county-level fund programming agencies to develop realistic public and private funding plans for these projects. Inclusion of TOD projects in county transportation investment plans, as is the case in the Alameda County CMA's Countywide Transportation Plan, is an important step toward eventual project funding.

The MTC's RTP indicates whether any planned public transportation funding is intended for a given TOD parking or intermodal facility. Some form of public grant funding is usually necessary to implement TOD projects. Including a project in the RTP indicates the level of progress the project has made toward actual development. These TOD projects do not usually appear in the CIP database because the funding and project management will be handled by a jurisdiction other than BART (usually the local jurisdiction).

The following Exhibits 1 through 4 depict the implementation status of the District's TOD program providing information on Completed Projects, Approved Projects and Projects in formal negotiations, Exhibits 5 and 6 provide summary information for these projects, including the dollar value of private investment on District property and transit ridership and fairbox revenue expected from these projects.

Figure B-1 2007 Station Access Inventory Summary

BART Station	Parking Spaces	Motorcycle Spaces	Bicycle Racks	Bicycle Lockers	Bicycle Station Spaces	Taxi Zone	Connecting Bus Routes
San Francisco							
Millbrae	2,981	23	40	46	0	Yes	6
San Francisco Intl Airport	0	0	0	0	0	Yes	3
San Bruno	1,072	0	18	30	0	Yes	5
South San Francisco	1,371	16	30	30	0	Yes	5
Colma (a)	2,236	16	40	24	0	Yes	11
Daly City	2,047	24	49	16	0	Yes	8
Balboa Park	0	0	35	12	0	No	11
Glen Park	53	19	35	16	0	No	5
24th Street/Mission	0	0	49	0	0	No	5
16th Street/Mission	0	0	56	0	0	No	7
Civic Center	0	0	35	0	0	No	14
Powell Street	0	0	0	0	0	No	21
Montgomery Street	0	0	0	0	0	No	21
Embarcadero (b)	0	0	0	0	120	No	18
Fremont	· ·	Ü	· ·	Ü	.20		
Fremont	2,142	9	121	34	0	Yes	34
Union City	1,155	6	84	20	0	Yes	22
South Hayward	1,253	6	56	30	0	Yes	10
Hayward	1,467	Ü	70	20	0	No	19
Bay Fair	1,669	8	42	16	0	Yes	9
San Leandro	1,270	10	84	56	0	Yes	8
Coliseum/Airport	978	24	63	2	0	Yes	9
Fruitvale (c)	871	10	56	40	236	Yes	13
Lake Merritt	219	10	21	52	0	No	8
Dublin/Livermore	217	10	21	02	O	110	O
Dublin/Pleasanton (d)	3,047	28	54	24	0	Yes	14
Castro Valley	1,118	22	20	20	0	Yes	3
Richmond	1,110	22	20	20	O	103	J
Richmond	605	0	21	2	0	Yes	9
El Cerrito del Norte	2,180	18	154	28	0	No	22
El Cerrito Plaza	749	16	94	78	0	Yes	10
North Berkeley	797	24	184	58	0	Yes	4
Downtown Berkeley (e)	0	0	18	0	105	Yes	12
Ashby	606	24	147	36	0	Yes	3
Pittsburg/Bay Point	000		,	00	Ŭ	103	Ü
Pittsburg/Bay Point	2,036	15	24	20	0	Yes	7
North Concord/Martinez	1,977	21	60	16	0	Yes	5
Concord	2,345	24	126	28	0	Yes	11
Pleasant Hill (f)	3,060	24	210	100	0	Yes	10
Walnut Creek	2,096	24	91	64	0	Yes	10
Lafayette	1,529	24	84	30	0	No	3
Orinda	1,442	21	26	24	0	No	2
Rockridge	869	18	308	56	0	Yes	5
MacArthur	618	8	84	30	0	Yes	8
Oakland	010	U	04	50	O	103	3
19th Street	0	0	22	0	0	No	14
12th Street	0	0	0	8	0	No	20
West Oakland	445	24	91	8	0	Yes	4
TOTALS	46,303	516	2,802	1,074	461	24 Yes/15 No	429

⁽a) Colma Station includes 1,074 spaces in the SamTrans surface parking lot.

⁽b) Bikestation Embarcadero is an attended bicycle parking facility with a capacity for 150 bikes.

⁽c) 13 additional lockers are provided by the city of Alameda for exclusive use of Alameda residents.

⁽d) BART and Alameda County added 427 temporary spaces until construction of a BART parking garage and transit village at the station are complete.

⁽e) Bikestation Berkeley is an attended bicycle parking facility with a capacity for 77 bikes.

⁽f) Pleasant Hill includes 581 temporary spaces for I-680/24 construction mitigation measure.

Figure B-2 Station Ridership Trends, Average Weekday Exits

Station	FY01	FY02	FY03	FY04	FY05	FY06	FY07	Ranking		rowth Trends
Richmond	(a) 3,977	4,106	3,636	3,264	3,289	3,251	3,257	(b) 36	FY06-FY07 0%	-18%
El Cerrito Del Norte	8,962	7,746	6,863	7,279	7,398	7,707	7,831	12	2%	-13%
El Cerrito Plaza	3,932	3,733	3,677	3,696	3,704	3,852	4,087	30	6%	4%
North Berkeley	3,876	3,516	3,254	3,436	3,512	3,674	3,819	33	4%	-1%
Berkeley	10,769	10,875	10,555	10,529	10,393	10,703	11,175	8	4%	4%
Ashby	4,325	4,002	3,719	3,797	3,933	4,141	4,286	29	4%	-1%
MacArthur	6,527	5,905	5,688	6,044	6,230	6,622	6,968	17	5%	7%
19th Street Oakland	8,352	8,092	7,663	7,623	7,899	8,416	8,454	10	0%	1%
12th Street / Oakland City Center	12,523	12,075	12,016	11,899	11,783	12,038	12,290	6	2%	-2%
Lake Merritt	4,656	4,573	4,644	4,803	4,756	5,012	5,306	22	6%	14%
Fruitvale	8,228	7,195	6,293	6,232	6,687	7,048	7,250	16	3%	-12%
Coliseum / Oakland Airport	6,862	6,671	6,588	7,308	6,921	7,339	7,230	13	6%	14%
San Leandro	5,138	4,828	4,687	4,803	4,836	4,908	5,118	24	4%	0%
Bayfair	5,185	4,829	4,632	4,769	4,757	4,995	5,116	23	4%	0%
Hayward	4,982	4,606	4,353	4,261	4,320	4,452	4,553	28	2%	-9%
South Hayward	3,100	2,869	2,762	2,729	2,757	2,860	2,894	38	1%	-7 <i>%</i> -7%
Union City	4,187	3,885	3,740	3,719	3,725	3,898	4,011	31	3%	-4%
Fremont	6,300	5,834	5,694	5,868	6,099	6,495	6,818	18	5%	- 4 % 8%
Concord	6,010	5,624	5,279	5,154	5,118	5,250	5,384	21	3%	-10%
Pleasant Hill	6,742	6,178	6,036	6,160	5,962	6,044	6,030	19	0%	-10%
Walnut Creek	6,310	5,746	5,551	5,520	5,616	5,771	5,887	20	2%	-7%
Lafayette	3,207	3,012	2,957	3,018	3,034	3,132	3,226	37	3%	1%
Orinda	2,804	2,635	2,558	2,563	2,612	2,651	2,716	39	2%	-3%
Rockridge	4,916	4,470	4,488	4,552	4,587	4,820	4,921	26	2%	0%
West Oakland	4,910	4,606	4,190	4,227	4,307	4,516	4,695	27	2% 4%	-6%
Embarcadero	34,594	31,174	29,254	29,438	30,012	31,584	33,453	1	4% 6%	-0 <i>%</i> -3%
Montgomery Street	36,409	31,760	29,417	29,706	30,233	31,276	33,052	2	6%	-9%
Powell Street	25,391	25,019	22,141	22,491	22,691	23,272	26,170	3	12%	3%
Civic Center	17,753	17,570	17,486	18,609	18,645	18,463	19,061	4	3%	7%
16th Street Mission	9,186	8,436	7,903	8,469	8,813	9,529	10,177	9	7%	11%
24th Street Mission	11,433	10,926	10,500	11,004	11,119	11,579	12,178	7	5%	7%
Glen Park	7,431	7,014	6,799	6,559	6,514	6,941	7,418	15	7%	0%
Balboa Park	11,784	12,512	11,845	11,864	11,734	12,251	13,302	5	9%	13%
Daly City	8,101	7,722	7,650	7,319	7,275	7,879	8,257	11	5%	2%
Colma	7,096	6,530	6,332	3,770	3,221	3,181	3,350	35	5%	-53%
Castro Valley	2,142	2,010	1,987	2,080	2,129	2,234	2,388	41	7%	11%
Dublin / Pleasanton	6,411	5,916	5,854	6,365	6,572	6,995	7,503	14	7 <i>%</i> 7%	17%
North Concord / Martinez	2,019	1,827	1,674	1,625	1,606	1,648	1,832	43	11%	-9%
Pittsburg/BayPoint	4,986	4,697	4,597	4,752	4,818	4,868	4,986	25	2%	-7 <i>%</i> 0%
South San Francisco*	7,700	7,077	1,198	1,910	2,589	2,540	2,565	40	1%	n/a
San Bruno*			1,117	1,470	1,773	2,007	2,363	42	7%	n/a
San Francisco Airport*			3,399	3,084	3,505	3,773	3,981	32	7 % 5%	n/a
Millbrae			2,306	2,802	3,303	3,773	3,570	32 34	5% 7%	n/a n/a
Total	331,586	310,725	2,306 295,158		310,717	322,965	339,359	34	/ /0	11/4
	331,300	310,723	273,130	550,570	510,717	UZZ, 700	007,007			

⁽a) Totals vary slightly different from actual fiscal year average weekday exits due to chane in reporting methods

⁽b) Ranked by number of exits, 1 = most exits

^{*} SFO Extension service commenced on June 22, 2003

Completed Projects

	T	2	
Station	Development Status	Project Value	BART Facility
Castro Valley	96-unit housing; restored Victorian	\$20 M	Zone Command Police Facility
Hayward	Land swaps completed: 170 for-sale units, pedestrian plaza, new City Hall	\$20 M (City Hall only)	Pedestrian Path
Richmond Phase I	132 for-sale units; new Transit Plaza	\$100 M (both phases)	New transit plaza
Fruitvale Phase I	47 rental units, 135,000 sf (37,000 retail, 27,000 office, 71,000 public), pedestrian plaza	\$100 M	Replacement Parking Garage; Pedestrian Path
Powell	Letter of Intent executed; faregates installed	\$1.1 M	Additional faregates

Approved Projects

Station	Development Status	Project <u>Value</u>	BART Facility
Pleasant Hill	Under construction: 515 units, 40,000 sf retail, 290,000 sf office	\$350 M	Replacement Parking Garage
Richmond – Phase II	Replacement Parking Garage; 100 for-sale units, 17,000 sf retail	\$100 M (both phases)	Replacement Parking +170 spaces
Fruitvale – Phase II	425 units	\$130-190 M	
Walnut Creek	Option executed; beginning Environmental Impact Report: 450-550 units, 30,000 sf retail	\$100 M	Zone Command Police Facility

Approved Projects

		Droioet	
<u>Station</u>	Development Status	Value Value	BART Facility
Hercules	Option executed: Land swap	\$0.9 M net to BART	Increased commuter parking
Ashby	Option executed; fund raising continues: 80,000 sf office	\$47 M	New parking lot, elevator, staircase
West Dublin/Pleasanton	All agreements executed; Under Construction: New BART Station & Parking Garages; Private Development - 210 for-sale units, hotel, restaurant, 170,000 sf office	\$84 M (public) \$101 M (private)	New station, two new garages
Dublin/Pleasanton	Option executed: In construction	\$25 M	New parking garage w/500 new permanent spaces

In Negotiations

Station	Development Status	Project Value	BART Facility
MacArthur	540 units, 28,000 sf retail, 5,000 sf community space	\$350 M	New pedestrian plaza
West Oakland	Two negotiations	\$73 M (both projects)	Increased BART parking
Coliseum	800 units, 5,000 sf retail Additional commercial development on City land	\$341 M (BART land)	
El Cerrito Plaza	213 units, 7,000 sf retail	\$54 M	
Pittsburg/Bay Point	Preliminary negotiations	\$6.5 M	Increased BART parking

Development Summary

	I	
Development Status	Number of Projects	Dollar Value
Completed	5	\$241 M
Approved	8	M 868\$
In Negotiations	5	\$825 M
Ready for Development	8	
Total	26	\$1.96 B

Development	Number of	velopment Number of Annual New Annual Ne	Annual New
Status	Projects	Trips	Revenue
Completed	5	187,000	\$534,000
Approved	8	1,182,000	\$4,273,000
In Negotiations	5	991,000	\$3,187,000
Potential	8	n.a.	n.a.
Total	26	2,360,000	\$7,994,000

APPENDIX C: STRATEGIC PLAN FOCUS AREAS

THE BART CUSTOMER EXPERIENCE

Vision

The transit riders and residents of the San Francisco Bay Region will regard BART and its transit partners as providing seamless, safe, reliable, and customerfriendly transportation services and will consider themselves stewards of the system.

Goals

- 1. We will continually improve customer satisfaction by maintaining performance standards and providing quality customer service.
- 2. We will maximize regional transit access, convenience, and ease of use through effective coordination among transit providers.

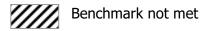
stevial as of the system	I	Sta	tus	
Performance Measure	Benchmark	FY05	FY07	Evaluation
% of Customer Satisfaction Survey respondents who rate their overall customer satisfaction with BART as very or somewhat satisfied.	80% or higher 82% by 2010	86% (from 2004 survey)	85% (from 2006 survey)	
% of customers who arrive on time.	94% or higher 96% by 2010	94.9%	95.4%	
Transit access mode share to BART.	21.5% by 2005 22.0% by 2010	20.5% (from 1998 survey, no update available)	20.5% (from 1998 survey, no update available)	
% of Customer Satisfaction Survey respondents who rate timeliness of connections with buses (transit)* as good or better.	54% or higher 56% by 2010	62.2% (from 2004 survey)	59.0% (from 2006 survey)	

^{*}All transit to be measured in future surveys.

Legend







TRANSIT TRAVEL DEMAND

Vision

The BART system will be used to its fullest potential, maximizing transit ridership in order to enhance the Bay Area's quality of life.

Goals

- 1. We will work to understand changing transit demand patterns and be prepared to respond to them, and we will work proactively to influence travel demand trends in the region that support transit ridership.
- 2. We will optimize the use of existing capacity.
- 3. We will encourage and facilitate improved access by all modes to and from our stations.
- 4. BART will work to close gaps in regional rail services between major population and employment centers and/or corridors.
- 5. BART will develop the line-haul and station throughput capacity to serve on average at least 500,000 weekday riders (without the addition of a second TransBay Tube).

		Sta	tus	
Performance Measure	Benchmark	FY05	FY07	Evaluation
Weekday off-peak ridership as a share of total ridership.	44% or higher 46% by 2010	43%	43%	
System utilization (passenger Miles/revenue seat miles).	35% or higher	31%	32%	
Line-haul capacity , station capacity and station access increases to serve a projected average weekday ridership of:	370,000 by 2008* 420,000 by 2013* 500,000 by 2018* *Assumes same service levels, ridership patterns & distribution by time of day as current conditions.	360,000 (current capacity)	360,000 (current capacity)	
BART links to regional rail network and airports.	At least one direct connection between BART and: Muni at: Embarcadero Montgomery Powell Civic Center Glen Park Balboa Park Caltrain at: Millbrae Santa Clara S.J. Diridon	Exists Exists Exists Exists Exists Exists Exists Part of SVRT Part of SVRT	Exists Exists Exists Exists Exists Exists Exists Part of SVRT Part of SVRT	

TRANSIT TRAVEL DEMAND

BART links to regional rail network and airports.

(continued)

VTA at: S.J. Diridon Montague S.J. Market St.	Part of SVRT Part of SVRT Part of SVRT	Part of SVRT Part of SVRT Part of SVRT
ACE at: S.J. Diridon Santa Clara	Part of SVRT Part of SVRT	Part of SVRT Part of SVRT
Capitol Corridor at: S.J. Diridon Richmond Coliseum Union City	Part of SVRT Exists Under Construction Proposed	Part of SVRT Exists Exists Proposed
S.F.International	Exists	Exists
Airport		
Airport Oakland Airport	Proposed rail connection exists via AirBART bus	Connection exists via AirBART bus; fixed guideway part of OAC project
	connection exists via	exists via AirBART bus; fixed guideway part of OAC

PHYSICAL INFRASTRUCTURE

Vision

Our infrastructure and equipment will be maintained in a condition that enables us to supply high quality, clean, safe, reliable, and customerfriendly transportation.

Goals

- 1. We will make annual investments in maintenance and repair of our physical infrastructure sufficient to support safety, cleanliness, reliability, train performance, and customer friendliness.
- 2. We will meet the demands of our customers and assure the long-term viability of BART by routinely reinvesting in our aging infrastructure to maintain its functional value.
- 3. We will ensure that infrastructure and maintenance capacity support the planned level of service. At the same time, we will provide the infrastructure flexibility to support the planned level of service.

		State	us	
Performance Measure	Benchmark	FY05	FY07	Evaluation
Minimum % of system operating expense allocated to capital investment.	3% or higher	2.4% equivalent grant funds programmed	6.6% (FY07 actual)	
Total investment in physical infrastructure between 2004 and 2014.	\$1.3B for earthquake safety \$2.3B for renovation	\$1.3B programmed \$297M programmed	\$1.3B programmed \$1.1B programmed	
% of fare gates in service.	97% or higher 98% by 2010	98.6%	99.0%	
% of elevators in service (combined station & garage).	98% or higher	99.2%	99.0%	
% of escalators in service (combined street & platform).	97% or higher	98.0%	97.6%	
% of BART customers who rate train cleanliness as "good" or better.	52% or higher 65% by 2010	58.5% (from 2004 survey)	49.6% (from 2006 survey)	
% of BART customers who rate the cleanliness inside stations as "good" or better.	56% or higher 70% by 2010	64.7% (from 2004 survey)	60.1% (from 2006 survey)	
Mean time between service delays (vehicle reliability).	1800 hours or more 2300 hrs by 2010	2016 hours	2942 hours (FY07 3 rd qtr YTD)	

FINANCIAL HEALTH

Vision

We will know where we are, and where we are going financially. Our operating and capital revenues and expenses will be balanced, predictable, sustainable, and sufficient to meet standards and goals.

Goals

- We will remain a transit service that is competitive in 1. terms of value (i.e., quality for price) for the people we
- 2. We will maintain and improve the stability of our financial base.
- 3. We will work with our regional transit partners to advocate for funding needed to sustain existing transit services and infrastructure reinvestment, and then to pursue prudent expansion.
- 4. Our financial choices will be guided by prudent fiscal policies and reliable, useful revenue and expense forecasts and plans.

	1	Sta	itus	
Performance Measure	Benchmark	FY05	FY07	Evaluation
% of Customer Satisfaction Survey respondents who rate BART as a good value for the money .	70% or higher	67% (from 2004 survey)	67% (from 2006 survey)	
Annual increase in operating costs per passenger miles.	At or below the 10-year average rate of inflation	10-yr avg. increase in Inflation: 2.7% Operating Cost: 2.4%	10-yr avg. increase in Inflation: 2.7% Operating Cost: 0.6%	
BART's operating ratio.	60% or higher	59.8%	67.0%	
BART's credit rating.	Fitch: AA Moody's: Aa3 S & P: AA-	Fitch: AA Moody's: Aa3 S & P: AA-	Fitch: AAA Moody's: Aa3 S & P: AA+	
BART's prudent reserve for economic uncertainty	5% of total annual operating expenses	\$10 million (2.4% of total annual oper expenses)	\$15.8 million (3.0% of total annual oper expenses)	

FY08 CIP Summary, Programs, and Projects APPENDIX D: Database

The two major BART CIP categories of funding status are:

- **Track One:** Fiscally constrained funded projects i.e. projects for which potential sources of funding can be reasonably identified within the twenty-five CIP timeframe. However, not all of the funding identified in Track One is actually secured through formal funds programming, and therefore cannot yet be considered certain. For this FY08 CIP. some assumptions regarding Track One grant funding have been made. Though the assumptions made can be considered reasonable, they are dependent on the occurrence of several events outside the control the District.
- **Track Two:** Unconstrained funded projects i.e. projects for which funding cannot yet be reasonably identified. Included in Track Two are projects identified as necessary over the twenty-five year horizon of the FY08 CIP Delivery of Track Two projects remains dependent on the generation of additional external and internal funding.
- Funding "Commitment" Definition: This type of funding represents funds that have been either programmed in a Transportation Improvement Program (TIP) or State Transportation Improvement Program (STIP). MTC's revenue forecast from the 25-year RTP is not used since the funds have not yet been secured.

The total amounts, including all Track 1 and Track 2 projects, shown in thousands of dollars for each CIP Program Area, are as follows:

FY08 CIP Program	Track 1	Track 2	Total
System Reinvestment	\$2,296,026	\$3,254,870	\$5,550,896
Earthquake Safety Program	\$1,318,000	\$ -0-	\$1,318,000
Security	\$40,872	\$211,130	\$252,000
Safety	\$20,625	\$ -0-	\$20,625
Service and Capacity Enhancement	\$177,144	\$2,370,000	\$2,547,144
System Expansion	\$1,774,430	\$ -0-	\$1,776,430
Total Capital Needs	\$5,627,097	\$5,836,000	\$11,463,097
Total Funding Sources	\$5,627,097	- 0 -	\$5,627,097
Total Shortfall	- 0 -	\$5,836,000	\$5,836,000

115,460 145,000 290,460 991 FY18-32 165,1 165,1 - - 116,836 25,785 55,920 34,225 25,785 55,426 - 3 - 3 55,426 § 2,000 28,825 28,825 107,036 FY15 32,000 -8,785 -40,785 FY 14 13,000 28,000 -41,000 FY13 \$ \$ \$ \$ \$ \$ \$ 33,125 33,125 69,100 -69,100 329,042 FY 12 68,700 28,000 -11,000 107,700 5,000 -157,084 -1*62,084* 32,825 62,825 55,800 -55,800 **H2,00**4 ,170 - \$ -- 53,170 ~ ~ ~ ~ ~ 32,425 54,000 68,500 1110,217 36,000 268,717 36,100 -36,100 782,446 13,000 -13,000 813,320 73,938 114,500 2,135 -190,573 10,000 1111,000 -63,685 184,685 30,000 -19,625 349,625 87,457 22,681 -25,000 *135,138* FY 08 ,497,057 45,361 -25,000 *I,567,418* 104,700 286,000 46,318 121,972 558,990 327,546 227,000 497,962 299,682 1,352,190 849,000 -444,316 1,293,316 174,000 -174,000 **4,945,914 Future Commitments** 99999 \$ \$ \$ \$ \$ \$ \$ 99999 107,436 45,361 10,127 -20,428 -59,115 23,028 102,571 37,346 61,000 48,700 33,853 *180,899* 131,000 54,500 2,050 8,500 196,050 Commitments to FY07 174,000 -174,000 5,588,359 1,604,494 90,722 10,127 25,000 1,730,343 125,128 286,000 105,433 145,000 661,561 364,892 288,000 546,662 333,535 1,533,089 980,000 54,500 2,050 452,816 *1,489,366* Total Commitments

Note: All amounts in thousands of dollars

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Other Funding Sources
Private Sector Financing
Miscellaneous Grants
Subroad Other Funding Sources
Total Track One Program

BART Funding Sources
2004 General Obligation Bonds
West Dublin Infill Station Bonds
BART Reserves
Altecations from Operating Budget
Subtoted BART Funding Sources

Local Funding Sources
Bridge Tolls (RMI & AB 664)
Bridge Tolls (RM2)
County Sales Tax
Other
Subtond Local Funding Sources

State Funding Sources
STIP (RTIP & STIP)
Prop 18 - 2006 infrastructure Bond
Traffic Congestion Relief Program
Local Sciencie Safety Retenfil Program
Suboual State Finding Sources

Federal Funding Sources
Section 5307 & 5309
CMAQSTP
DHS
Other
Subtonal Federal Funding Sources

Total Track One Program Funding Sources

Total Track One Program Capital Needs	Total Commitments	Commitments to FY07	Future Commitments	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18-32
System Reinvestment Program Rolling Stock Mainline	301,732	57,499	244,233 872.053	33,679	28,137	5,621	5,790	5,963	6,142	6,326	6,516	6,712	6,913	132,434
Stations	476,059	5,528	470,531	41,038	37,196	40,540	40,112	44,347	39,156	35,057	7,246	12,439	12,639	160,761
Controls & Communications	455,800	25,700	430,100	28,100	16,250	16,250	16,250	16,250	16,250	19,250	21,250	20,250	16,250	243,750
Facilities	11,500	6,500	2,000	•	•	•	•	•	'	1,000	2,000	2,000	•	•
Work Equipment Total Systen Reinvestment Program	95,382 2,251,034	2,400 136,135	92,982 2,114,899	2,513 148,860	2,628 117,771	2,707 98,710	2,788 98,566	2,872 103,091	2,958 98,199	3,046	3,138	3,232	3,329	63,772 1,113,962
Earthquake Safety	1,318,000	191,783	1,126,217	267,433	407,133	361,105	90,546	1	ı	1	1	1	1	1
Security and Safety Program Security	47,126	46,126	1,000	1,000	'	ı	1	ı	'	ı	1	'	'	1
Safety	20,625	2,275	18,350	18,350	1	1	ı	1	•	•	1	•	•	1
Total Security and Safety Program	67,751	48,401	19,350	19,350	i	1	1	'	1	1	1	1	1	1
Service and Capacity Enhancement Program Mainline	25,000	18,000	7,000	5,000	2,000	1	1	1	•	1	•	•	•	1
Stations	152,144	3,708	148,436	5,284	5,909	4,927	5,048	5,174	5,053	5,185	5,322	5,463	5,608	95,463
Total Service and Capacity Enhancement Program	177,144	21,708	155,436	10,284	606'/	4,92/	5,048	5,1/4	5,003	2,185	5,322	5,463	2,608	95,463
System Expansion Program Warm Springs Extension	747,000	55,000	692,000	42,000	115,000	147,000	173,000	98,000	79,000	38,000	ı	1	1	ı
BART/East Contra Costa Rail Extension (eBART) Oakland Airnort Connector	481,000	30.300	464,030	45,750 50.900	119.000	90,840	34,950	12.400	141,840	13,960	5.000	4.000	3.500	4.000
West Dublin/Pleasanton Station	84,200	20,600	63,600	47,900	15,700	'	'	. ' Î	, '	'	'	'	'	. '
Silicon Valley Extension Impact Study	3,230	'	3,230	3,230	•	'	'	'	'	'	•	•	'	'
Total System Expansion Program	1,774,430	122,870	1,651,560	189,780	316,460	365,740	297,650	180,330	227,540	57,560	5,000	4,000	3,500	4,000
Total Total One December Confed Nords	020002	200 002	5 057 453	FOT 363	040 272	030 403	010 10	200 000	23.0 703	164 166	00 130	1001	63 063	1 212 425
i otal Track One Program Capital Needs	666,886,6	768,076	3,007,402	/0/,650	849,273	830,482	491,810	c6c,882	330,792	104,133	867,68	91,901	82,083	1,413,425

Note: All amounts in thousands of dollars.

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									IK/	TRACK ONE PROGRAM – System Reinvestment:Investment	COCKAM-	system keir	vestment	ıvesımenı
	Total Commitments	Commitments to FY07	Future Commitments	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18-32
Rolling Stock FLEET REPLACEMENT FLOOR REPLACEMENT SEATING RECONFIGURATION & REPLACEMENT C-CAR HVAC REPLACEMENT STRATEGIC MAINTENANCE PROGRAM	90,722 2,000 3,400 2,300 15,436	45,361 - 2,000 - 10,138	45,361 2,000 1,400 2,300 5,298	22,681 2,000 1,400 2,300 5,298	22,680									
10% FLEXIBLE SET-ASIDE Total Rolling Stock	187,874	57,499	187,874 244,233	33,679	5,457	5,621	5,790	5,963	6,142	6,326	6,516	6,712	6,913	132,434
Mainline Capital Maintenance Rall Replacement & Guideway Renovation Traction Power Equipment Renovation Phase 2 Manline Renovation Program	38,553 422,500 437,508 12,000	1,000 16,250 21,258	37,553 406,250 416,250 12,000	1,030 16,250 26,250	1,061 16,250 16,250	1,093 16,250 16,250	1,126 16,250 16,250	1,159 16,250 16,250	1,194 16,250 16,250	1,230 16,250 16,250 3,000	1,267 16,250 16,250 5,000	1,305 16,250 16,250 4,000	1,344 16,250 16,250	25,745 243,750 243,750
Total Mainline	910,561	38,508	872,053	43,530	33,561	33,593	33,626	33,659	33,694	36,730	38,767	37,805	33,844	513,245
Stations ALAMEDA COUNTY STATION LIGHTING RENOVATION CONTRA COSTA COUNTY MEASURE J STATIONS PROJECTS SAN FRANCISCO PROPOSITION K STATIONS PROJECTS SYSTEMWIDE - STATION RENOVATION SYSTEMWIDE - STATION MODERNIZATION	3,428 50,385 19,625 196,621 206,000		3,000 50,385 19,625 191,521 206,000	3,000 785 5,253 32,000	785 5,411 31,000	3,182 785 5,573 31,000	5,587 785 5,740 28,000	9,650 785 5,912 28,000	4,281 785 6,090 28,000	785 6,272 28,000	- 785 6,461	5,000 785 6,654	5,000 785 6,854	17,685 11,775 131,301
Total Stations	476,059	5,528	470,531	41,038	37,196	40,540	40,112	44,347	39,156	35,057	7,246	12,439	12,639	160,761
Controls & Communications TRAIN CONTROL RENOVATION ONBOARD VEHICLE AUTOMATIC TRAIN CONTROL (VATC) TRAIN CONTROL UNINTERRUPTABLE POWER SUPPLIES TRAIN CONTROL ROOM HVAC NETWORK SWITCHES PHASE 2 CONTROLS & COMM RENOVATION PROGRAM	422,500 16,300 1,000 1,500 2,500 12,000	16,250 7,200 - 1,000 1,250	406,250 9,100 1,000 500 1,250 12,000	16,250 9,100 1,000 500 1,250	16,250	16,250	16,250	16,250	16,250	16,250	16,250	16,250	16,250	243,750
Total Controls & Communications	455,800	25,700	430,100	28,100	16,250	16,250	16,250	16,250	16,250	19,250	21,250	20,250	16,250	243,750
Facilities CONCORD CAR WASH PHASE 2 FACILITIES RENOVATION PROGRAM Total Facilities	6,500 5,000 11,500	6,500	5,000	1	1			'	1	1,000	2,000	2,000	'	
Work Equipment CAPITAL EQUIPMENT REPLACEMENT NON-REVENUE VEHICLES REPLACEMENT SPARE PARTS AND INVENTORY REPLACEMENT	14,421 42,409 38,553	300 1,100 1,000		350 1,133 1,030	400 1,167 1,061	412 1,202 1,093	424 1,238 1,126	437 1,275 1,159	450 1,313 1,194	464 1,353 1,230	478 1,393 1,267	492 1,435 1,305	507 1,478 1,344	9,707 28,320 25,745
Total Facilities	95,382	2,400	92,982	2,513	2,628	2,707	2,788	2,872	2,958	3,046	3,138	3,232	3,329	63,772

Total System Reinvestment Program

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Note: All amounts in thousands of dollars.

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Earthquake Safety Program

EARTHQUAKE SAFETY PROGRAM

FY18-32		1
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FY15		1
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FY13		1
FY12		ı
FY11	90,546	90,546
FY10	361,105	361,105
FY09	407,133	407,133
FY08	267,433	267,433
Future Commitments	1,126,217	1,126,217
Commitments to FY07	191,783	191,783
Total Commitments	1,318,000	1,318,000

Total Earthquake Safety Program

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Note: All amounts in thousands of dollars

	Future	Commitments	Total	
TRACK ONE PROGRAM – Security Program				

Security and Safety Program	Total	Commitments	Future	5	5	2	2	25	2	3	2		2	
	Commitments	10 F10/	Commitments	80.1	F109	2	=	7 1	2 1	 	۲ <u>۱</u>	9	<u>:</u>	F718-32
Security STRUCTURAL AUGMENTATION - NON-STATION CCTV SURVEILLANCE SYSTEM INTEGRATED SECURITY RESPONSE CENTER OTHER SECIRITY PROJECTS	23,778 11,119 7,027 5,202	23,778 11,119 6,027 5,202	1,000,	1,000										
Subtotal	47,126	46,126	1,000	1,000		•	•		•	•	-	-	1	1
Safety SUBWAY VENTILATION FANS SUBWAY EMERGENCY LIGHTING STATION FIRE ALARMS ELEVATED GUIDEWAYS FALL PROTECTION S F STATIONS - ELEVATOR HEADHOUSE MODIFICATION	5,000 5,000 7,500 1,000	200 200 200 200 1,675	4,800 4,800 7,500 800 450	4,800 4,800 7,500 800 450										
Subtotal	20,625	2,275		18,350		ľ		'	•	•		'	•	
Total Security and Safety Program	67,751	48,401	19,350	19,350	ı	ı	1	ı	•	ı	ı	ı	ı	1

Note: All amounts in thousands of dollars.

								TRACK ONE PROGRAM – Service and Capacity Enhancementancement	PROGRAM	A – Service	and Cap	acity Enha	cementa	ncement
Service and Capacity Enhancement Program	Total Commitments	Commitments to FY07	Future Commitments	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18-32
Mainline PLEASANT HILL CROSSOVER	25,000	18,000	7,000	5,000	2,000									
Total Mainline	25,000	18,000	7,000	5,000	2,000	'	1	•	•	•		•	•	1
Stations SYSTEMWIDE - ADA ACCESSIBLITY IMPROVEMENTS SYSTEMWIDE - GENERAL STATION ACCESS IMPROVEMENTS 24TH STREET/MISSION - PLAZA ENHANCENEINTS BALBOA PARK - INTERMODAL ACCESS IMPROVEMENTS SF STATIONS - BICYCLE ACCESS SF STATIONS - MARKET STREET ESCALATOR CANOPIES	`	3,708	139,246 6,250 450 1,000 1,250 240	3,819 625 200 250 250 250	3,934 625 250 750 250 100	4,052 625 250	4,173 625 250	4,299 625 250	4,428	4,560 625	4,697 625	4,838 625	4,983 625	95,463
Total Stations	152,144	3,708	148,436	5,284	5,909	4,927	5,048	5,174	5,053	5,185	5,322	5,463	2,608	95,463
Total Service and Capacity Enhancement Program	177,144	21,708	155,436	10,284	7,909	4,927	5,048	5,174	5,053	5,185	5,322	5,463	2,608	95,463

Note: All amounts in thousands of dollars.

Expansion	FY18-32	4,000		
TRACK ONE PROGRAM – System Expansion Expansion	FY17	3,500		
1 – System	FY16	4,000		
PROGRAM	FY15	5,000		
RACK ONE	FY14	38,000 13,960 5,600		
_	FY13	79,000 141,840 6,700		
	FY12	98,000 69,930 12,400		
	FY11	173,000 34,950 89,700		
	FY10	147,000 90,840 127,900		
	FY09	115,000 66,760 119,000 15,700		
	FY 08	42,000 45,750 50,900 47,900 3,230		
	Future Commitments	692,000 464,030 428,700 63,600 3,230		
	Commitments to FY07	55,000 16,970 30,300 20,600		

Total System Expansion Program

4,000

3,500

4,000

5,000

57,560

227,540

180,330

297,650

365,740

316,460

1,651,560 189,780

122,870

1,774,430

Note: All amounts in thousands of dollars.

Total Commitments

System Expansion Program

Warm Springs Extension BART/East Contra Costa Rail Extension

Oakland Airport Connector West Dublin/Pleasanton Station Silicon Valley Extension Impacts Study

747,000 481,000 459,000 84,200 3,230

TRACK TWO PROGRAM: FY98 - FY32	RAM: FY08 - FY32	
TRACK TWO PROGRAM	Remaining	
	Requirement	
System Reinvestment	\$ 3,254,870	
Security	\$ 211,130	
Service & Capacity Enhancement	\$ 2,370,000	
System Expansion Projects	(TBD)	
Total TRACK TWO PROGRAM	\$ 5.836.000	

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SYSTEMWIDE: ELEVATORIESCALATOR ARCHTPECTURAL REPAIRS EMERGENCY ALARMS & LIGHTING VENTILATION/HVAC LIGHTING REPAVEMENT ROOFING STATION CLEANING PARKING LOT REHABILITATION STATION SEWER PUMP OTHER NEEDS FROM STATION MODERNIZATION PROGRAM OTHER NEEDS FROM STATION MODERNIZATION PROGRAM	Remaining Requirement	180 180 180 180 180 180 180 180 181 181	\$ 103,000	\$ 311,000
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ONTROLS & COMMUNICATIONS	Requirement Requirement
FARE COLLECTION EQUIPMENT INTEGRATED CONTROL SYSTEM & RELATED ITEMS VEHICLE AUTOMATIC TRAIN CONTROL ADVANCE AUTOMATIC TRAIN CONTROL OTHER COMMUNICATIONS SYSTEMS & EQUIPMENT	\$ 90,300 \$ 52,500 \$ 163,780 \$ 196,350 \$ 31,070
Total CONTROLS & COMMUNICATIONS	\$ 534,000

FACILITIE	∞	Remaining	ining
		Requirement	ement
	SHOP REPAIRS	↔	21,000
		↔	29,930
	MAJOR SHOP EQUIPMENT	⇔	31,500
		↔	4,200
Total	Total FACILITIES	↔	86,630

Remaining Requirement 35,000 35,750 2,000 45,970 62,410 30,000

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EMERGENCY COMMUNICATION AND OCC LOCKS AND ALARMS	PUBLIC SAFETY PREPARNESS	STRUCTURAL AUGMENTATION SURVEILLANCE - TRACK 2 PORTION	WEAPONS DETECTION SYSTEMS

Total SECURITY

Note: All amounts in thousands of dollars.

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TRACK TWO PROGRAM – Service & Capacity Enhancement Program	Remaining	Requirement		\$ 840,000	\$ 656,250	\$ 682,500	\$ 191,250
TRACK TWO PROGRAM – Ser							
	Y ENHANCEMENT				S	VEHICLES (WITH STORAGE)	(INCLUDING TRACK)
	VICE & CAPACIT			ACCESS	STATION	VEHICLI	SYSTEM

Total SERVICE & CAPACITY ENHANCEMENT

\$ 2,370,000

SYSTEM EXPANSION PROJECTS	Remaining Requirement
WARM SPRINGS EXTENSION - IRVINGTON STATION eBART (Phase 2) RARTHENSION Fortnession	(TBD) (TBD)
Total SYSTEM EXPANSION PROJECTS	•

TRACK TWO PROGRAM - System Expansion Program