

**BART SAN FRANCISCO AIRPORT EXTENSION
BART SYSTEM MAP**

FRUITVALE BART TRANSIT VILLAGE PROJECT

BART is a participant in a unique federally-funded Livable Communities Initiative project in the Fruitvale neighborhood of Oakland. Located on BART-owned property adjacent to the Fruitvale BART Station, the Fruitvale Transit Village Project is an exciting community development project that will revitalize an inner-city, low-income neighborhood through a socially, environmentally, and economically sustainable public-private venture. The project has already drawn widespread national recognition and once complete, is expected to serve as a model for community revitalization efforts throughout the nation.

Sponsored by the Spanish Speaking Unity Council, a non-profit community service agency, the City of Oakland, and BART, the Fruitvale BART Transit Village is a large-scale, mixed-use, pedestrian and transit-oriented project that will convert more than 13 acres of an asphalt parking lot into a compact village of homes, shops, offices and services in the heart of one of the most vibrant and diverse communities in the Bay Area.

The majority of the project will be located on the parking lot of the Fruitvale BART Station. The project is centered on a broad pedestrian plaza that will connect the BART station with International Boulevard (East 14th Street), East Oakland's primary commercial thoroughfare. The pedestrian plaza is expected to host cultural events, farmers markets and craft fairs. With landscaped gathering places and retail shops running its length, the plaza will become a focal point of activity in the neighborhood. The plaza will also be home to a health care clinic, a senior center, a branch of the Oakland Public Library and a child care center with a 10,000 square-foot play yard.

Although the overall project is still in the environmental review phase, it has garnered significant financial support from various federal sources. Initially, the project received approximately \$470,000 from the Federal Transit Administration (FTA) through the Metropolitan Transportation Commission for planning studies. Another \$780,000 in ISTEA enhancement funds has been earmarked to build the pedestrian plaza linking the BART station with the new community facilities. The child care center has been designated to receive a \$2.3 million FTA grant which was personally awarded by FTA Administrator Gordon G. Linton in September 1997 during a ceremony at the Fruitvale BART Station. Finally, the FTA has funded some \$2.8 million (through the local AC Transit bus agency) for a new bus intermodal facility at the station. Construction is scheduled to begin this year.

Employees of Bank of America and some members of the general public are participating in the pilot project. The cars are used in a variety of settings: home to BART station, station to work site, and company pool cars for work sites. Likewise, recharging of the vehicles takes place at several locations: homes, four BART stations, and potentially at some work sites. Each vehicle is leased by a user for \$100 - \$150 per month.

High Temperature Superconducting Technologies for Traction Power Support

BART has initiated two FTA funded projects to study the applicability of high temperature superconducting (HTS) materials in transit applications. One is with American Superconductor Corporation to model the application of superconducting traction power feeder cables and to evaluate the economic benefits of this application of superconductivity. The second project, with Pirelli Cable Corporation, will produce a conceptual design for an HTS feeder cable system for traction power transmission. Through these projects, BART and the transit community will gain an understanding of the applicability, potential economic benefits, and operating requirements of HTS systems for traction power support and transmission.

The need to increase the third rail power capacity will become more severe as trains are added to the BART system and operated at closer headways. Inadequate capacity causes voltage sags at the trains and degrades system performance. One approach to maintain the required voltage level is to increase the number of substations, but this requires large capital expenditures for the installation of additional substations and feeders. Also, due to topographical constraints (e.g. Transbay Tube at BART) electrical substations cannot be added at some desired locations. A goal of these studies is to find lower-cost alternative approaches to improve traction power capacity.

FEDERAL GRANTS SUPPORT INVESTMENTS IN LEADING EDGE TECHNOLOGIES

Advanced Automatic Train Control

In 1994, BART teamed up with the Hughes Aircraft Company to form a Regional Technology Alliance to develop an advanced train control system that will allow trains to operate at closer intervals and at higher speeds while using less energy. The \$44.3 million project, for Phases 1 and 2, is funded in part by a \$19.5 million military dual-use grant awarded in 1994 as part of the federal Defense Advanced Research Project Agency's (DARPA) Technology Reinvestment Program (TRP). Operational efficiencies made possible by the AATC system are needed to maintain levels of service on the existing BART system as well as to facilitate the increased ridership and service demands associated with operating the extensions.

Phase 1, development and testing of prototype hardware and software, was successfully completed in April 1996. Initial prototype testing of the new system produced flawless results at BART's 2.5-mile test track in Hayward. Phase 2 activities are now underway and are scheduled for completion in late September 1999. During this phase, BART will install production hardware at the Lake Merritt and Fruitvale Stations and on 10 revenue cars. A major goal of the program is to obtain the California Public Utilities Commission safety certification which will enable BART to operate the design in revenue service.

During this Phase 2 program, Harmon Industries Inc., a major commercial U.S. supplier of rail signaling equipment, replaced Hughes as the principle private-sector member of the Regional Technology Alliance. Hughes remains a participant in the program and will complete the development of key software elements of the AATC system.

As a defense conversion project, AATC utilizes radios developed for the Army's Enhanced Position Location and Reporting System (EPLRS), which currently has a prohibitively high unit cost. By developing the technology commercially for transit systems, AATC would help lower the unit cost of EPLRS equipment by as much as 35 to 50 percent.

Electric Station Cars Partner with BART for an All-Electric Commute

BART has secured \$1.41 million in funding from the Federal Defense Advanced Research Projects Agency (via CALSTART), the Bay Area Air Quality Management District (BAAQMD), Pacific Gas and Electric (PG & E) Company, and the California Energy Commission (CEC) to support a 2.5-year demonstration of 40 Norwegian-built electric station cars. The purpose of the program is to demonstrate the usefulness of electric cars for short, everyday trips to and from transit stations.

BART OAKLAND INTERNATIONAL AIRPORT CONNECTOR PROJECT

The Port of Oakland, the City of Oakland and BART are continuing to pursue funding options to advance the BART Oakland International Airport Connector Project, a three-mile, grade-separated fixed guideway system between the Oakland International Airport and the BART Coliseum Station. The intermodal rail transit project promises to offer millions of air passengers and employees convenient and reliable access to the Oakland International Airport, the fastest growing airport in California.

The project partners are pursuing funding options to complete the planning phase of the Connector Project. The scope of the project would include a technology assessment, environmental review, design/build specifications and preliminary cost estimates.

The Port, the City, and BART have contacted potential systems suppliers and have initiated a review of appropriate technologies. The last feasibility study was completed in 1993 under the auspices of the Federal Transit Administration's (FTA) Suspended Light Rail Technology (SLRT) Demonstration Program.

A fixed guideway connection between the Oakland International Airport and the 95-mile, four-county BART system has been considered a key link in the regional transportation system for 25 years. The project is included in the BART Extensions Program, with initial studies going back to the early 1970s. An improved transit link is a critical component to maintaining sufficient ground access to the Oakland International Airport.

Air traffic at the Oakland International Airport has and will continue to grow dramatically, increasing from 9.8 million passengers in 1995 and to an estimated 22.4 million in the year 2010. The current bus link between BART and the Oakland International Airport (carrying approximately 372,000 annual passengers) cannot be expanded to handle the 3.3 million annual passengers projected for an Oakland International Airport-BART fixed guideway connector due to existing congestion on Hegenberger Road, the primary avenue of access to the airport. In addition, wetlands surrounding the area make an expansion of the roadway infeasible. A grade separated fixed guideway system is therefore the best solution to these environmental and congestion mitigation issues and would easily accommodate the airport's growth.

original AFC equipment which now must be replaced or modified. All ticket vendor and addfare machines will be replaced with new units with advanced functions such as credit/debit payment and Smart Card capabilities. Thus far, BART has developed and advertized detailed technical specifications for the project and proposals have been accepted from three pre-qualified firms. Negotiations with the companies will begin shortly and a primary procurement contract on the provision of equipment is expected to be awarded this fall.

and air-conditioning systems, propulsion and brake systems, gearboxes, and shocks. The cars will also be upgraded to meet ADA requirements.

- ▶ The first two fully renovated cars were delivered to BART in late February and early March. Acceptance testing will be performed through June and July. The overall rail car renovation program is expected to take six years to complete.
- ▶ Remanufacturing extends the useful life of the cars by 20 years at approximately 50 percent of the cost of purchasing new vehicles.

Mint Car and Mint Station Programs

- ▶ Although all of the original fleet of BART cars will undergo complete restoration, 100 cars were selected for immediate interior rehabilitation under the "Mint Car" program. The project has now been completed and all 100 cars have been thoroughly cleaned and equipped with new seats and upholstery, carpeting, revamped lighting, and redesigned doors and thresholds. While the new interiors provide a more comfortable and aesthetically pleasing ride for our customers, the new doors and thresholds mean fewer breakdowns, more reliable cars and more cars available for service.
- ▶ "Mint Station" work has been completed at eight BART stations, with work at eight more stations under way. Renovation of the station facilities is extensive and designed to create a safer, cleaner and more attractive environment.

Escalator Replacement

- ▶ Exposure to harsh elements, usage and age has contributed to the decrease in reliability of some of BART's escalators, particularly the street to station units. The worst performing escalators, a total of 19, are being replaced with new "heavy duty" ones that are rated at twice the minimum required by state code.
- ▶ At present, the first eight replacement escalators are now in service and the remaining 11 are slated to be up and running by mid-1998.

Fare Gate Project

- ▶ Additional fare gates have been installed at some of BART busiest stations to ease congestion during peak hours. Fifteen have already been added with another 5 scheduled to be installed by spring of this year.

Automatic Fare Collection (AFC) Modernization Program

- ▶ The combined effects of substantially increased usage and age have taken their toll on the

SYSTEM WIDE RENOVATION PROGRAM PRODUCES RESULTS

The System Wide Renovation Program is a comprehensive program of projects to overhaul the hardware and operational systems of the core BART system to ensure its continued reliability at increasingly higher levels of service and to more fully comply with the Americans with Disabilities Act (ADA) mandates. This 10-year, \$1.1 billion renovation program has been under way for three years now and already great strides have been made in restoring the system to near-original design standards.

To date, 55 percent of the work is under construction. Such progress would not have been possible if not for the federal programs that fund a substantial portion of this essential renovation effort. Under a 1994 agreement with the Metropolitan Transportation Commission, the federal Section 3 Fixed Guideway and the Congestion Mitigation and Air Quality Improvement (CMAQ) Improvement programs will help fund, through the year 2004, the largest component of our renovation effort: the rebuilding of 439 aging rail cars. In addition, the federal Section 9 Capital program provides funding for the replacement of rail and automatic fare collection equipment. A recently completed three-year, phased-in, 45 percent fare increase is generating some \$200 million toward the cost of the renovation work.

As Congress debates reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA), BART strongly encourages Members to enact a bill that retains the integrity of the existing transit program structure, particularly those programs which are enabling us to complete the renovation work. The programs put federal dollars to work in ways that return tangible benefits to taxpayers. The improvements being made to the core BART system will translate into fewer train delays, fewer ticket problems, more reliable escalators and elevators, and safer more comfortable station facilities.

The following are highlights of key components of the work in progress:

Rail Car Renovation

- ▶ The largest and most complex project is the complete restoration of the original fleet of 439 cars. Each car has logged more than one million miles - some more than two million miles. While the integrity of the car shells remains intact, the mechanical components are ready for replacement or a complete overhaul.
- ▶ Restoration of the cars is being done in nearby Pittsburg, California in what used to be an old steel plant. The project employs some 250 local residents.
- ▶ The cars will be stripped to the shell. The interiors will be completely redone with new window glass, seating, carpets, upholstery, and grab bars. Mechanical and electrical components will either be completely overhauled or replaced. These include new heating

ADA FUNDING - A NATIONAL IMPERATIVE

In 1998, Bay Area transit operators will spend approximately \$59 million in operating costs to provide 3 million paratransit trips - van or taxi transportation to elderly and disabled individuals who are eligible for the service under the Americans with Disabilities Act (ADA). In the past three years, operators have more than doubled their spending for paratransit in order to comply with the January 1997 mandate of this civil rights legislation.

Demand for ADA paratransit service is expected to grow. Without federal support to offset these substantial new costs, transit operators will face significant challenges in maintaining long-term compliance with ADA's complementary paratransit provisions without negatively affecting the quality and quantity of existing fixed route transit service.

Congress must commit to helping public transit operators implement plans that are already in place to achieve and maintain compliance with the ADA. The ISTEA reauthorization legislation should, therefore:

- ▶ Reauthorize and fund the federal transit program at no less than current authorized levels.
- ▶ Extend the state and metropolitan planning requirements to include the participation of state and local social service programs that receive federal transportation funding administered by the Department of Health and Human Services.
- ▶ Establish a paratransit technical assistance program within FTA to assist public transit operators to identify and implement cost containment and productivity improvement strategies for ADA complementary paratransit services.
- ▶ Expand eligibility for funding within the Department's Intelligent Transportation Systems initiative to provide funding to public transit operators to identify, test, deploy and evaluate technology that will improve the productivity of ADA paratransit services.

creating jobs, and in making our cities, suburbs and towns better places to work and do business.

- ▶ If not for public transportation, another 5 million cars and 27,000 new lane miles of roads would be required. There would be nearly 200,000 more fatalities, injuries and accidents every year on the nation's roads. Another four lanes (or maybe a second deck) would be required on local freeways - at untold fiscal, environmental, and aesthetic cost. And, Americans would spend another 367 million hours each year sitting in traffic jams, at a cost to them and to the economy of more than \$19 billion.
- ▶ 69 out of 90 metropolitan areas surveyed by the report are choosing rail transit as an essential part of their multi-modal transportation investment strategies. Rail transit systems such as BART link suburbanites to jobs in the central cities, link central city residents to suburban jobs, and reduce suburb-to-city and suburb-to-suburb congestion.
- ▶ Rail transit "delivers" in a number of important ways:
 - By attracting and focusing economic development;
 - By creating jobs and increasing sales;
 - By reducing congestion in strategic corridors and reducing costs to motorists;
 - By enhancing property values, rents and occupancy rates; and
 - By providing access to jobs for workers, and to labor markets for employers.
- ▶ Before the enactment of ISTEA, provisions of federal transportation law tended to distort state and local transportation investment decision processes, creating an uneven playing field which generally tilted toward highway investments, i.e., uneven match requirements and inflexible funding categories whereby the "color of money" often dictated the investment priorities.
- ▶ ISTEA went a long way toward leveling the playing field and eliminating the biases and distortions that existed in state and local transportation decision-making processes. The result has been a more accurate expression of the true demand for transit.
- ▶ In recent years, after the passage of ISTEA, more and more people have come to realize that public transit needs to be an essential element of America's strategic transportation investment portfolio for the 21st century. As Congress debates the reauthorization of ISTEA, it is critical that ISTEA's principles of "leveling the playing field" between highways and transit, and flexibility for state and local officials to choose the most suitable combination of transportation investments, be preserved and strengthened.

STRATEGIC TRANSPORTATION INVESTMENTS MAKE “DOLLARS AND SENSE”

“The bottom line is this: investment in public transportation makes dollars, and it makes sense. The benefits to motorists, to businesses, to transit riders, and to American society as a whole far outweigh the costs.”

A July 1997 report entitled, “Dollars and Sense: the Economic Case for Public Transportation in America,” by Aldaron, Inc., a transportation and public policy consulting firm, vividly illustrates the extraordinary contributions that public transit makes to our nation’s economy and to the quality of life in all of our communities. Produced for the Campaign for Efficient Passenger Transportation, a coalition promoting the interests of public transportation and the reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the report makes three major findings:

- ▶ While transit is clearly a boon to the people who use it, even larger benefits accrue to motorists, businesses, and society in general.
- ▶ Given flexibility in how they develop their transportation investment strategies, more and more areas - central cities, suburbs, and smaller towns and villages - are choosing to make public transit an essential component of their strategic transportation investment portfolio.
- ▶ In those areas where such strategic investments in transit have been made, ridership has grown, and the economic benefits to those communities have risen accordingly. The market for transit is there, but the nation’s transportation strategies must be geared to tap into that market.

Other significant findings include the following:

- ▶ According to the U.S. Department of Transportation, in 50 metropolitan areas the number of hours per capita that people spend delayed by traffic congestion increased 95 percent from 1982 to 1993, even though the number of trips that people made increased by only 16.9 percent.
- ▶ For every dollar the American taxpayer spends on supporting the nation’s public transportation systems, the economic return on that investment is at least four or five to one, while, according to Congress’ Office of Technology Assessment, the hidden subsidies for motor vehicle use are in the hundreds of billions of dollars annually.
- ▶ Transit makes the roads work better, and transit is playing a key role in helping America be more competitive in the global marketplace, in making Americans more productive, in

Reauthorization of Programs that Support BART's System Wide Renovation Program

- ▶ BART is particularly concerned about preservation of ISTEA transit programs that fund our crucial System Wide Renovation Program. These funding programs are helping to ensure that BART continues to provide reliable, quality transit service to Bay Area communities. Specifically, the Section 3 Fixed Guideway and Congestion Mitigation and Air Quality (CMAQ) Improvement programs will help fund, through the year 2004, the largest component of our renovation effort: the rebuilding of 439 aging rail cars. The Section 9 Capital program provides funding for replacement of rail and automatic fare collection equipment.

Americans with Disabilities Act

- ▶ BART renews its request that Congress provide funding and regulatory assistance to enable transit operators to meet the substantial mandates imposed by the Americans with Disabilities Act. See page 21 for further details.

\$124.0 million to complete the Colma Station Extension, the first phase of the
 BART SFO Extension
 \$113.0 million to advance the BART SFO Extension
 \$124.3 million for the Tasman Corridor Project
\$ 2.1 million for FTA oversight
 \$363.4 million = TOTAL

FFGA Commitment and Remaining Authorization Need

- ▶ The total federal commitment to the BART SFO Extension is \$750 million under the terms of the FTA FFGA. The project has already received appropriations totaling \$113 million. Therefore, the remaining authorization needed to complete the federal commitment to the project is \$637 million.

\$750 million - FFGA commitment
 - \$113 million - appropriations received to date
 \$637 million - reauthorization need

Section 3 New Rail Starts Language under the House and Senate Reauthorization Bills

- ▶ BART urges Members to support a reauthorization bill that provides overall authorization funding levels for the New Rail Starts Program sufficient to enable projects with FFGAs, such as the BART SFO Extension, to seek annual appropriations consistent with those funding commitments.
- ▶ If Congress ultimately decides to include specific authorizations for individual New Rail Starts projects, the BART SFO Extension will require \$637 million to fulfill its FFGA commitment through the year 2005.

“Minimum Allocation” Amendments

- ▶ BART urges Senators to oppose the so-called “minimum allocation” amendments that are expected to be offered during Senate floor debate on the reauthorization bill. These amendments would require that certain rural states receive minimum funding allocations from parts of the transit program and would allow the funds to be available for highway projects. The “minimum allocation” amendments would fundamentally alter the current transit program structure which is designed to respond to critical transportation needs across the country, including access to jobs, reducing traffic congestion and air pollution, and providing a transportation lifeline to those with few alternatives - older Americans, people with disabilities and those without cars.

REAUTHORIZATION OF ISTEA

Reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA), which expires on March 31, 1998, will be one of the most significant transportation issues addressed by the 105th Congress. The measure will determine federal surface transportation policies and funding priorities through the end of this century and into the next. As the debate over the future of our nation's transportation program intensifies, BART encourages Congress to enact a multi-year reauthorization bill that reinforces ISTEA's overall program structure, particularly the federal transit program.

Federal support for transit investments is a fundamental part of a balanced national transportation program. Judicious investments in transit that recognize and leverage local funding help to strengthen our nation's economic productivity and global competitiveness, improve the quality of life in our communities, and provide all Americans with access to the broad range of affordable transportation services they need to lead fulfilling, productive lives.

Section 3 New Rail Starts Authorization for the BART SFO Extension

- ▶ Reauthorization of the Federal Transit Administration's (FTA) Section 3 New Rail Starts Program is a top priority for BART, in light of our extension to the San Francisco International Airport.

ISTEA Authorization for the BART SFO Extension

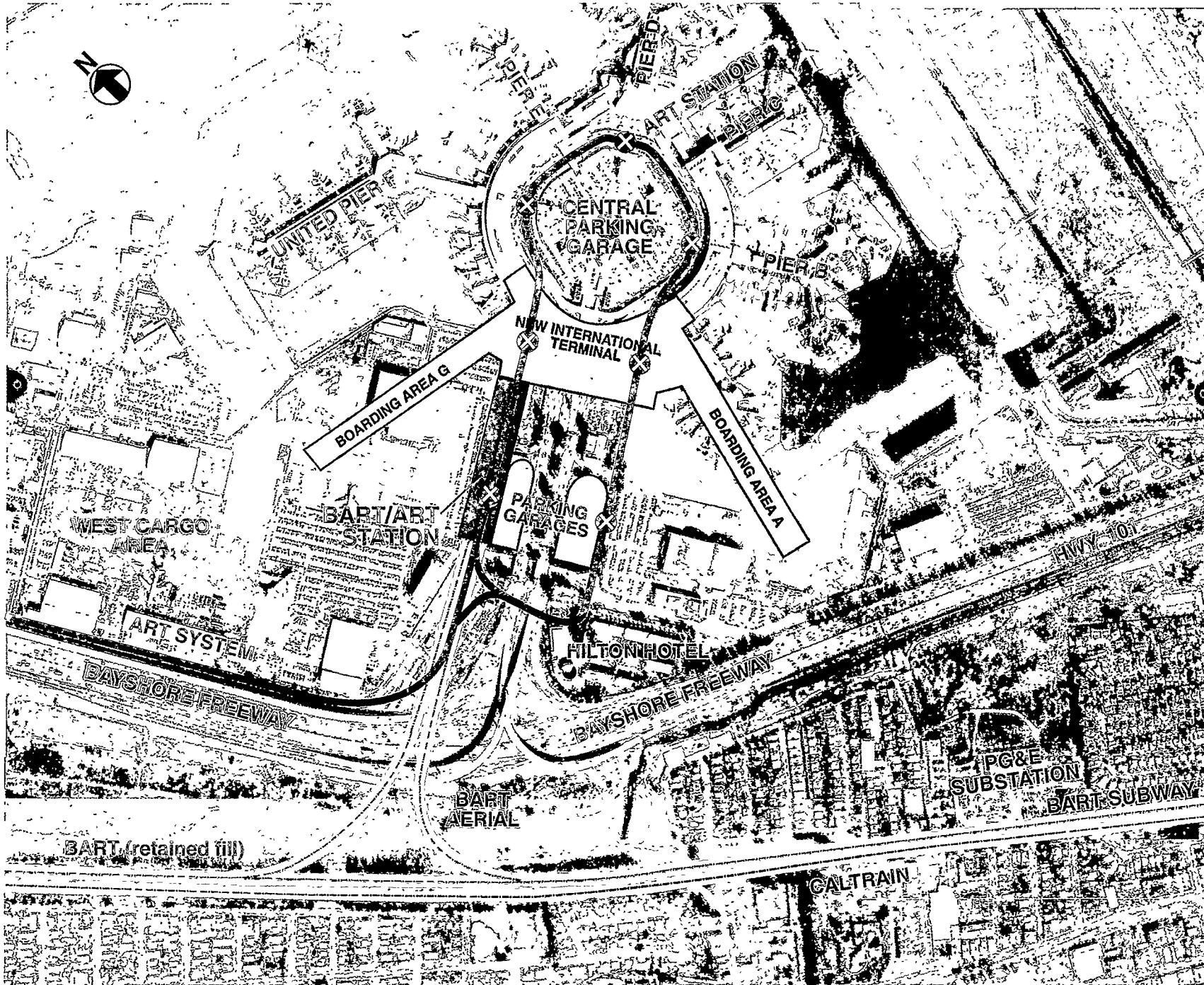
- ▶ ISTEA authorized \$568.5 million in Section 3 New Rail Starts for two San Francisco Bay Area projects - the BART SFO Extension and the Tasman Corridor Light Rail Project in Santa Clara County. The projects are part of a program of interrelated projects, pursuant to a regional agreement, Resolution 1876, adopted by the Metropolitan Transportation Commission in 1988. The architects of ISTEA recognized, however that both projects would require additional authorizations and included language under Section 3032(g)(2) that authorizes the Secretary of Transportation to issue full funding grant agreements (FFGAs) to complete the projects using the full amount of the unobligated balance in the Mass Transit Account of the Highway Trust Fund. Both projects now have FTA FFGAs, but each requires additional authorization authority to fulfill those federal commitments - either individually via earmarks or collectively under the overall Section 3 New Rail Starts program.

Appropriations Against ISTEA Authorization

- ▶ To date, the projects have received appropriations totaling \$363.4 million against the \$568.5 million authorization. The funds have been obligated as follows:

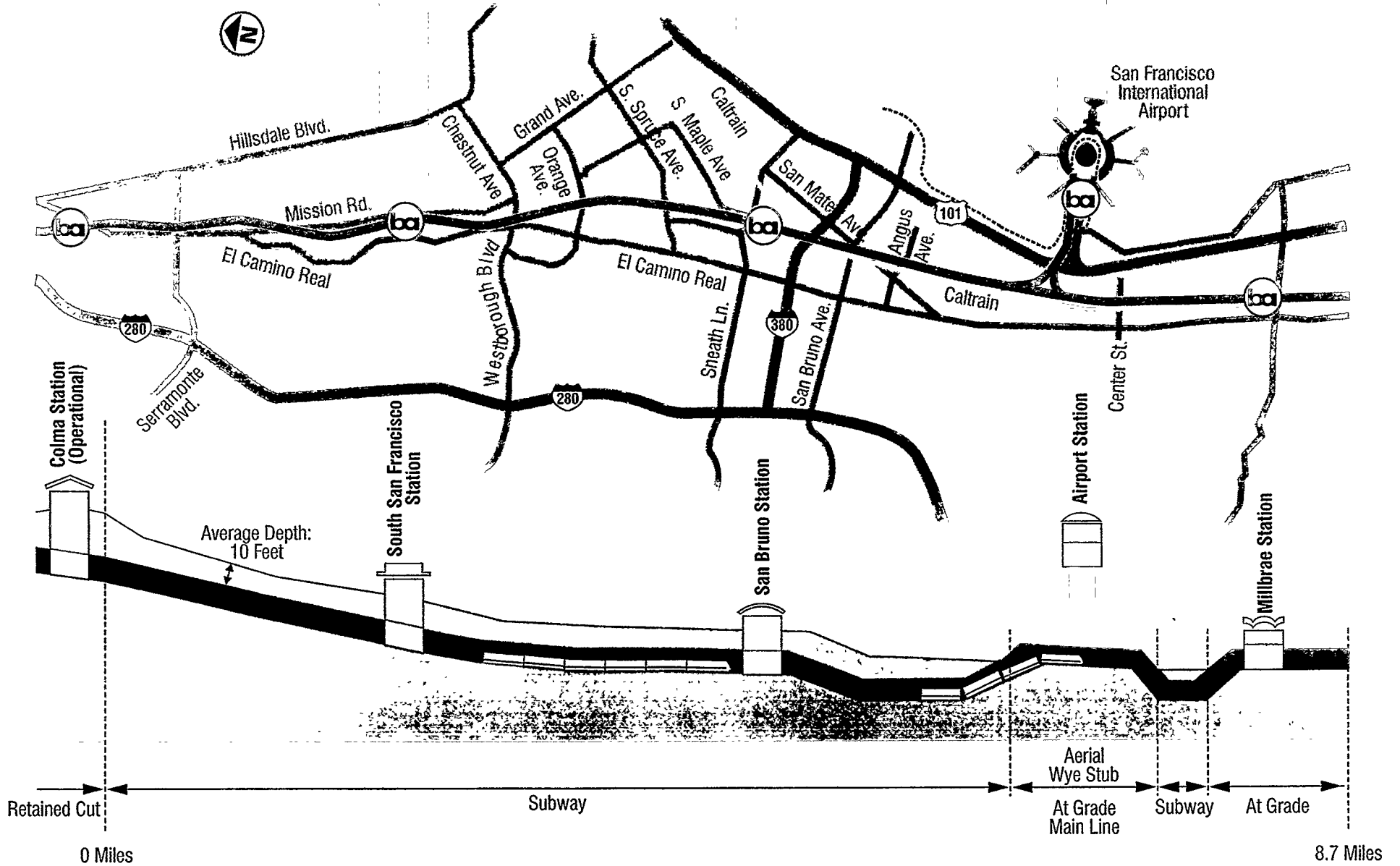
FINANCING OF THE OVERALL BART EXTENSIONS PROGRAM

- ▶ The original 71.5-mile, three-county BART system was constructed entirely with state and local funds - a testament to the Bay Area's commitment to and support of investments in transit. Out of the entire BART system, the BART SFO Extension is the only construction project to receive federal funds.
- ▶ Since BART's inception, there have always been plans to expand the original system to provide greater mobility throughout the San Francisco Bay Area. But despite plans, for almost two decades such activity was stalled. Too many Bay Area transit projects were competing for too little money.
- ▶ In 1988, the Bay Area finally reached agreement on an ambitious financing plan for extending BART and building other regional rail projects. The 1988 agreement that initiated this ambitious extensions program was brokered by the Metropolitan Transportation Commission (MTC) which acts as the Bay Area's metropolitan planning organization. MTC negotiated a regional agreement, known as MTC Resolution 1876, under which the region's representatives agreed to support the full program of rail projects until all were achieved. This, in turn, enabled the region to gain the support of the Bay Area Congressional delegation for the federal funding component of the program.
- ▶ Four major extensions make up the \$2.9 billion BART component of the region's rail extensions program - the cornerstone of which is the extension to San Francisco International Airport - the only federally-funded BART extension project.
- ▶ Thus, over 70 percent of the overall BART Extensions Program - essentially three extension projects in the East Bay - is funded by state and local sources, with less than 30 percent derived from federal funds.
- ▶ Two of the BART East Bay extensions - funded entirely with state and local funds - are already complete and in revenue service. The final phase of the eight-mile, two-station Pittsburg/Antioch Extension in eastern Contra Costa County opened in December 1996, while the 14-mile, two-station Dublin/Pleasanton Extension in Alameda County was operational in May of 1997. A third project in southern Alameda County, the Warm Springs Extension, has been delayed by an environmental issue and a funding shortfall, but plans continue to extend BART to this region.
- ▶ Like the core system, all of the operating costs on each extension, including the BART SFO Extension, are being funded locally.

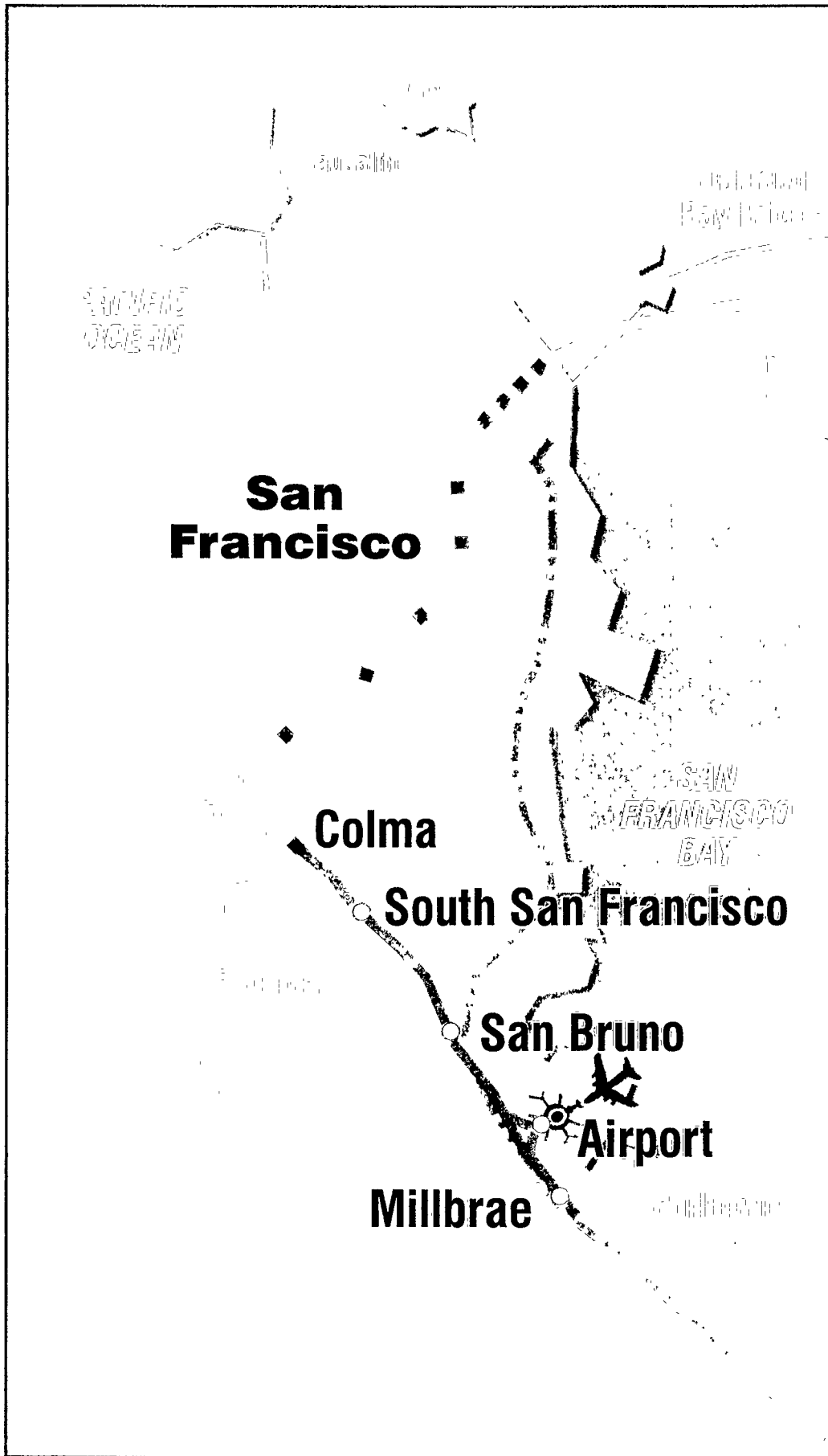


PATRONS: 17,800

**BART SAN FRANCISCO AIRPORT EXTENSION
BART FACILITIES AT SFIA WITH AIRPORT MASTER PLAN PROJECTS - AERIAL SITE PLAN**



**BART SAN FRANCISCO AIRPORT EXTENSION
LINE ALIGNMENT AND PROFILE**



**BART SAN FRANCISCO AIRPORT EXTENSION
WEST BAY / BART SYSTEM MAP**

freeways would be staggering if not for the BART SFO Extension.

- ▶ The BART SFO Extension is a good model for advancing transit investments of national significance. The project is the cornerstone of BART's overall \$2.9 billion rail extension program, 70 percent of which is paid for by state and local funds. These funds have been leveraged by the federal commitment to the BART SFO Extension. See page 15 for further details.
- ▶ All BART operating costs are covered by a combination of passenger fares and a dedicated local operating fund source. No federal operating assistance is required.
- ▶ Once the project is complete, the newly expanded 103.7-mile BART system will, for the first time, provide seamless, cross-platform transfers at the Millbrae intermodal terminus station for BART and CalTrain riders. This will create a vastly expanded regional rail network serving five Bay Area counties with a total of 180.7 miles of rail transit mobility.
- ▶ Designed for maximum customer convenience, the project will enable arriving BART passengers to immediately check luggage to all airlines. At least 50 percent of all airport bound passengers will disembark within a five-minute walk of their airline ticket counter. Other passengers will be able to board the planned Airport Rail Transit System for trips to more distant terminals and work places. Moving sidewalks, escalators and elevators will also be readily available.
- ▶ The BART SFO Extension has captured the enthusiastic support of the traveling public, business leaders, civic groups and elected officials. Cities impacted by the project have passed resolutions of support, voters in San Mateo County have twice approved ballot measures directing local funds to be used for the project, every major daily newspaper in the BART service area has given editorial support, and surveys of Bay Area residents consistently express strong support for BART and the airport extension.
- ▶ Progress on the BART SFO Extension triggers local funding from San Mateo County to help fund the East Bay Extensions.

- ▶ In September 1997, Congress appropriated \$29.9 million for the project in FY 1998.
- ▶ In October 1997, BART awarded a \$10 million contract for site preparation and utility relocation.
- ▶ On November 3, 1997, BART officially broke ground on the BART SFO Extension.
- ▶ In February 1998, BART awarded a \$526 million design/build contract for line, track work and systems on the entire 8.7-mile project. It includes all of the track structures and track work, part of the aerial structure serving the airport, station shells at South San Francisco and San Bruno, plus the power, communications and computerized train control systems.
- ▶ Also in February 1998, BART awarded a \$70.5 million design/build contract for the Millbrae intermodal terminus station.
- ▶ Separate design/build contracts are expected to be awarded later in 1998 for the South San Francisco (estimated at \$26 million) and San Bruno (estimated at \$30 million) stations.
- ▶ The project schedule calls for revenue service to begin in 2001.

Project Benefits

- ▶ A state-of-the-art rapid rail transit and airport connection, the project will serve multiple national interests by providing millions of travelers with fast and convenient access to and from an international trade, business, and tourist destination; reducing traffic congestion and improving air quality.
- ▶ Once complete, the BART SFO Extension is expected to be the most heavily used extension in the entire regional system, carrying an estimated 68,600 passengers a day.
- ▶ The project will serve as an extraordinary economic catalyst, strengthening our nation's long-range economic health by facilitating the explosion in travel and trade between the U.S. and Pacific Rim nations, employing thousands of people during construction, and fostering vast new business opportunities.
- ▶ SFIA is considered a premier "aerial gateway" to the lucrative trade opportunities that flourish in the Pacific Rim region. To keep pace with the huge increase in global travel, SFIA has undertaken a \$2.4 billion expansion program, including a new international terminal which will double the size of the existing facility. The airport projects a 70 percent increase in air passenger travel by the year 2006, or approximately 51 million travelers a year. The ensuing impact on traffic congestion along adjacent Bay Area

BART SAN FRANCISCO AIRPORT (SFO) EXTENSION - AN OVERVIEW

Project Description

The BART SFO Extension will add a total of 8.7 miles of new passenger track to the existing 95-mile, four-county BART rapid rail transit system to provide direct service to the San Francisco International Airport (SFIA). BART is the largest regional rail system in Northern California, while SFIA is the seventh busiest airport worldwide. The project alignment includes:

- ▶ 7.5 miles of mainline track extending south from the Colma BART Station in northern San Mateo County to an intermodal terminus station in Millbrae that will provide direct connections between BART and CalTrain, the 77-mile Peninsula commuter rail service;
- ▶ A 1.2-mile Y-shaped segment running perpendicular to the mainline track, which will connect BART to SFIA's new International Terminal and the Airport Rail Transit System; and,
- ▶ Four new stations in South San Francisco, San Bruno, SFIA, and Millbrae.

Project Budget

The total project budget is \$1.167 billion. As illustrated on pages 8 and 9, funding is provided by the following sources:

- ▶ \$750 million from the Federal Transit Administration
- ▶ \$200 million from the San Francisco International Airport
- ▶ \$108 million from the California Transportation Commission
- ▶ \$99 million from the San Mateo County Transit District
- ▶ \$10 million from the Metropolitan Transportation Commission

Project Milestones

- ▶ As of FY 1997, BART had received \$83 million in federal appropriations.
- ▶ On June 30, 1997, the Federal Transit Administration executed a \$750 million full funding grant agreement for the project.

SCHEDULE OF FUNDING FOR THE BART SFO EXTENSION PROJECT

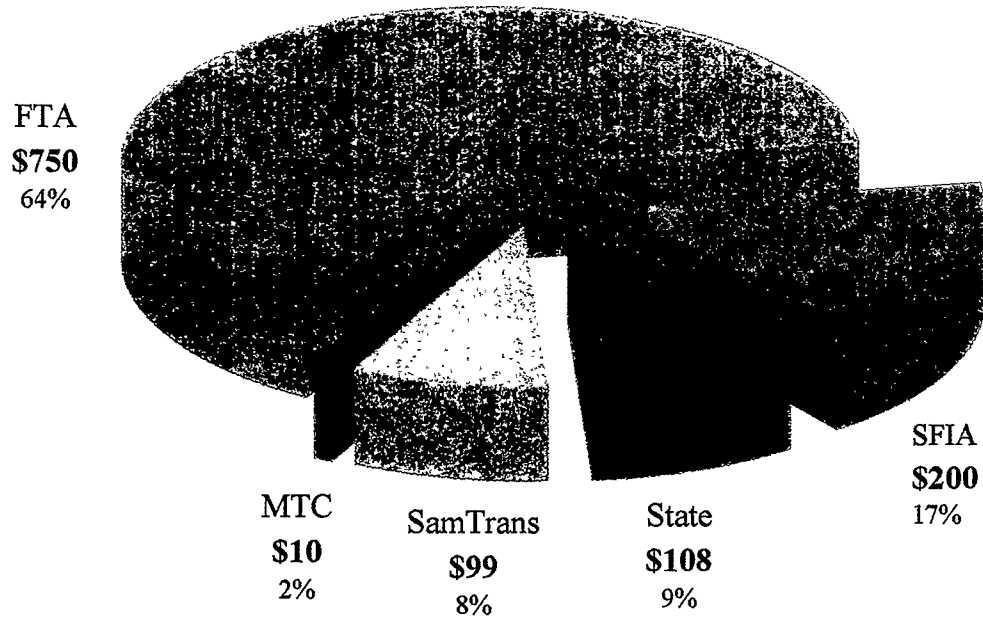
02/24/98

FEDERAL FISCAL YEAR	FEDERAL CAPITAL PROGRAM FUNDS	STATE TCI	STATE FCR	STATE PROP 116	WEST BAY BRIDGE TOLL FUNDS	SAN FRANCISCO INT'L AIRPORT	SAN MATEO MATCH (SAMTRANS)	YEARLY TOTAL
THRU 94	22,500,000	9,250,000					9,250,000	41,000,000
FY 95	33,000,000							33,000,000
FY 96	11,115,000				1,000,000			12,115,000
FY 97	17,308,180							17,308,180
FY 98	29,900,000	46,750,000	5,000,000	10,000,000	3,375,000	2,000,000	1,014,000	98,039,000
FY 99	100,494,669	2,000,000	35,000,000		3,000,000	18,725,000	77,994,000	237,213,669
FY 00	84,000,000				2,625,000	19,811,000	10,742,000	117,178,000
FY 01	80,000,000					27,537,000		107,537,000
FY 02	80,605,331					18,927,000		99,532,331
FY 03	100,000,000							100,000,000
FY 04	100,000,000							100,000,000
FY 05	91,076,820							91,076,820
TOTALS	750,000,000	58,000,000	40,000,000	10,000,000	10,000,000	87,000,000	99,000,000	1,054,000,000*

*Does not include the San Francisco International Airport's contribution of \$113 million

**BART EXTENSION INTO
THE SAN FRANCISCO INTERNATIONAL AIRPORT
PROJECT FUNDING PROFILE**

Total Cost: \$1, 167 million



Legend:

- FTA: Federal Transit Administration (US DOT)
- SFIA: San Francisco International Airport
- State: State of California, including Proposition 116 Funds
- SamTrans: San Mateo County Transit District
- MTC: West Bay Bridge Toll Funds

Past Federal Appropriations

▶	Previous fiscal years	\$ 83.0 million
	FY 1998	<u>\$ 29.9 million</u>
	TOTAL	\$112.9 million

- ▶ These funds have been used to complete preliminary engineering, initiate utility relocation, acquire right-of-way and transition into the construction phase of the project.

FY 1999 APPROPRIATIONS REQUEST FOR THE BART SFO EXTENSION

FY 1999 Appropriations Request for the BART SFO Extension

- ▶ For FY 1999, BART requests that Congress appropriate \$100,591,375.00 in Section 3 New Rail Starts for the SFO Extension, consistent with the President's FY 1999 Budget and the project full funding grant agreement (FFGA) funding schedule - \$74 million for FY 1999, plus approximately \$26.5 million recommended, but not appropriated for FY 1998.
- ▶ To ensure that BART delivers the project on time and within budget, annual appropriations must be consistent with the FFGA funding schedule. Failure to stay on schedule and within budget would defeat not only the benefits of the project's innovative design/build strategy, but would also undermine Congress' specific directives over the past several years to reduce costs, particularly the federal share. The BART project is one of four public infrastructure projects nationwide that is participating in a Federal Transit Administration (FTA) demonstration program on the cost-effectiveness of design/build construction contracting.

Use of Funds

- ▶ The federal funds will be used to pay for substantial, on-going project construction activities. In 1998, BART will award four major design/build contracts which will complete all of the project's construction contracts.
- ▶ Two design/build contracts were awarded in February of this year - a \$526 million contract for the line, track work and systems and another \$70.5 million contract for the Millbrae Intermodal Station. Two more, one for the South San Francisco Station and another for the San Bruno Station, will be awarded later in the year. The San Francisco International Airport is constructing the BART station which will be located on airport property at the new International Terminal.
- ▶ Under the project funding plan, a BART/Metropolitan Transportation Commission Joint Powers Authority Board will issue short-term commercial paper to finance cash flow needs as they occur over the next four to five years. Accordingly, commercial paper will be liquidated by annual federal appropriations and local matching funds.

needs across the country, including access to jobs, reducing traffic congestion and air pollution, and providing a transportation lifeline to those with few alternatives - older Americans, people with disabilities and those without cars.

- ▶ BART strongly supports the preservation of ISTEA transit programs which fund our System Wide Renovation Program. These programs, the Section 3 Fixed Guideway, Congestion Mitigation and Air Quality Improvement Program (CMAQ), and the Section 9 Capital Program, have been instrumental in ensuring that BART's renovation program moves forward, thus enabling BART to continue to provide reliable, quality transit service to San Francisco Bay Area communities.
- ▶ BART renews its request that Congress provide funding and regulatory assistance to enable transit operators to meet the substantial mandates imposed by the Americans with Disabilities Act.

SUMMARY OF BART'S FY 1998 FEDERAL LEGISLATIVE AGENDA

BART recommends the following actions as Congress deliberates the FY 1999 transportation appropriations bill and the reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991:

FY 1999 New Rail Starts Request for the BART San Francisco Airport (SFO) Extension

- ▶ Appropriate \$100,591,375.00 in Section 3 New Rail Starts for the BART SFO Extension, consistent with the President's FY 1999 Budget and the full funding grant agreement (FFGA) funding schedule. Specifically, this amount reflects the FFGA schedule which calls for \$74 million in FY 1999 and approximately \$26.5 million recommended, but not appropriated, for FY 1998.
- ▶ Federal support for the project at the level requested is crucial to ensuring that BART delivers the project on time and within budget, without burdening taxpayers with additional financing costs.
- ▶ BART appreciates Congress' commitment to work with us in partnership with state, regional and local funding agencies to build a nationally significant intermodal transit project that will serve millions of travelers for generations to come.

Reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA)

- ▶ BART encourages Congress to enact a multi-year reauthorization bill that reinforces ISTEA's overall program structure, particularly the federal transit program.
- ▶ With respect to the New Rail Starts Program, BART urges Members to support a reauthorization bill that provides overall authorization funding levels sufficient to enable projects with FFGAs, such as the BART SFO Extension, to seek annual appropriations consistent with those funding commitments.
- ▶ If Congress ultimately decides to include specific authorizations for individual New Rail Starts projects, the BART SFO Extension will require \$637 million to fulfill its FFGA commitment through the year 2005.
- ▶ BART urges Senators to oppose the so-called "minimum allocation" amendments that are expected to be offered during Senate floor debate on the ISTEA reauthorization bill. These amendments would require that certain rural states receive minimum funding allocations from parts of the transit program and would allow the funds to be available for highway projects. The "minimum allocation" amendments would fundamentally alter the current transit program structure which is designed to respond to critical transportation

support of the San Francisco Bay Area Congressional delegation and the cooperation of key members of the House and Senate Appropriations Committees, we return with a Federal Transit Administration full funding grant agreement (FFGA) for the BART SFO Extension.

Awarded on June 30, 1997, this \$750 million federal commitment marked the most significant milestone yet in the implementation of this eagerly-awaited rail/airport connection. The project will extend BART, the largest regional rail system in Northern California, to the San Francisco International Airport, the seventh busiest airport in the world. Once complete, the BART SFO Extension is expected to be the most heavily used extension in the entire regional system, carrying an estimated 68,600 passengers a day.

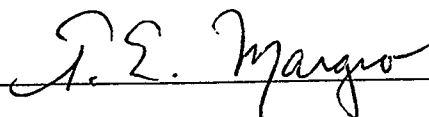
BART is deeply grateful for Congress' support of the BART SFO Extension. Annual appropriations for this project remain a top priority for 1998, along with reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA). With a FFGA in place, we look forward to continuing our partnership with the Congress and together delivering a project that promises to become a national model of efficiency and intermodalism.

All of the projects described in this report are partially supported by federal funding. Most of the funding sources are authorized under ISTEA, which expires on March 31 of this year. As Congress prepares to reauthorize this legislation - the most significant transportation-related measure of the 105th Congress - we strongly encourage enactment of a bill that maintains the integrity of the existing program structure, particularly the federal transit program.

Federal support for transit investments is a fundamental part of a balanced national transportation program. Judicious federal investments in transit that recognize and leverage local funding help to strengthen our nation's economic productivity and global competitiveness, improve the quality of life in our communities, and provide all Americans with access to the broad range of affordable transportation services they need to lead fulfilling, productive lives.

Last fall, on its 25th anniversary of revenue service, BART was recognized by the American Society of Mechanical Engineers International (ASME) as an Historic Mechanical Engineering Landmark. In bestowing the award, ASME found that BART has been the prototype for most modern rail transit systems and that the integration of many new engineered components into a unified system was a key to its success. To receive recognition from such an esteemed group of engineering professionals was indeed an honor.

BART is proud to have been at the vanguard of such innovation in the rapid transit industry. As we prepare to enter the 21st century, we take inspiration from our legacy of using leading edge technologies to provide effective transportation solutions.



BART Celebrates 25 Years of Service: Focuses on the Future

Message from General Manager Thomas E. Margro

More than thirty-five years ago, San Francisco Bay Area voters ushered in a new era of modern rapid rail transit service when they approved a \$792 million bond issue that would finance with local funds construction of the original 71.5-mile, three-county Bay Area Rapid Transit District (BART) system. When revenue service began in 1972, BART represented the first major "new generation" rail system to be built in this country in 60 years and one of the largest single construction projects ever undertaken in the Bay Area.

Now, more than 25 years later, we reflect with pride on BART's legacy of service to the Bay Area, where residents and visitors alike have come to rely on BART for convenient and efficient transportation service. Our trains have carried more than 1.4 billion people over 16 billion passenger miles. Average weekday ridership has grown to an all-time high of nearly 270,000 passengers per day. The system itself has undergone tremendous growth and change. With nearly 24 miles of newly completed extensions up and running, BART is now a 95-mile system with 39 stations serving four counties on both sides of San Francisco Bay.

Today, in keeping with the visionary spirit that launched BART, we are concentrating our efforts on doing what it takes to expand and renew the system so that it has the capacity to meet future demands for mobility in the region. Toward that end, the San Francisco Airport (SFO) Extension Project is under construction and slated for completion in the year 2001. A comprehensive, System Wide Renovation Program is also well under way to ensure that overall operations perform at optimum levels well into the 21st century. Other exciting initiatives are on the horizon, including the Oakland Airport Connector Project, the Advanced Automatic Train Control Project, and an innovative development project to create a revitalized "transit village" at the Fruitvale BART Station in Oakland. In addition, our electric "station car" program offers customers at two BART stations the opportunity to lease electrically-powered vehicles as part of a station access demonstration project.

Throughout all of the expansion and change, fiscal and operational efficiency continues to be a top priority. BART enjoys the highest fare box operating ratio (fare box revenue contribution to operating costs) in the San Francisco Bay Area and is among the highest in the nation. This, coupled with a dedicated local operating fund source, enables BART to deliver consistently high quality transit service without any federal operating assistance. Our year-to-date average daily on-time performance rate is at 95.6 percent.

Every year in March, representatives from BART travel to Washington, D.C. to attend the American Public Transit Association's legislative conference and to meet with legislators and staff to discuss our federal legislative priorities. Funding for the BART SFO Extension is always at the top of our agenda. This year is no different. Thanks to the effective advocacy and tireless

San Francisco Bay Area Rapid Transit District
1998 REPORT to CONGRESS

Table of Contents

Message from General Manager Thomas E. Margro.....	1
Summary of BART's FY 1998 Federal Legislative Agenda.....	3
FY 1999 Appropriations Request for the BART SFO Extension.....	5
BART SFO Extension - Project Funding Profile.....	7
Schedule of Funding for the BART SFO Extension Project.....	8
BART SFO Extension - an Overview.....	9
BART SFO Extension - Illustrations.....	12 - 14
Financing of the Overall BART Extensions Program.....	15
Reauthorization of ISTEA.....	16
Strategic Transportation Investments Make "Dollars and Sense".....	19
ADA Funding - A National Imperative.....	21
System Wide Renovation Program Produces Results.....	22
Projects On the Horizon:	
BART Oakland International Airport Connector Project.....	25
Federal Grants Support Investments in Leading Edge Technologies.....	26
Fruitvale BART Transit Village Project.....	28
Back Cover - BART System Map	



SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT
 800 Madison Street - Lake Merritt Station
 P.O. Box 12688
 Oakland, CA 94604-2688
 Telephone (510) 464-6000



March 1998

Dear Member of Congress:

On behalf of the BART Board of Directors, I am pleased to transmit our 1998 Report to Congress. I hope it will be a useful reference as you develop a FY 1999 Department of Transportation and Related Agencies Appropriations bill and reauthorize the landmark Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

The centerpiece of this report concerns our \$1.167 billion, state-of-the-art rapid rail transit extension to the San Francisco International Airport, also known as the BART SFO Extension. The project will connect the 95-mile, four county BART system, the largest regional rail system in Northern California, with the seventh busiest airport in the world. Thanks to the steadfast support of the San Francisco Bay Area Congressional delegation and the cooperation of both the House and Senate Appropriations Committees, last June the BART SFO Extension received a crucial \$750 million Federal Transit Administration full funding grant agreement (FFGA), which enabled BART to break ground on the project last fall.

The long-awaited BART SFO Extension has begun to take shape and the full promise of this nationally significant intermodal transit project is just a few years away. We look forward to continuing our partnership with the Congress and together delivering a world-class rapid rail transit connection to the San Francisco International Airport, the "aerial gateway" to worldwide trade opportunities.

This report also includes policy recommendations on ISTEA reauthorization and provides updates on other BART initiatives which are funded in part with federal dollars, such as our System Wide Renovation Program, the Advanced Automatic Train Control Project and the Oakland Airport Connector Project.

If you are interested in further information about any aspect of the BART system, please don't hesitate to contact us. We would welcome the opportunity to show you first hand the role that BART plays in keeping the San Francisco Bay Area moving! In closing, thank you very much for your support. From all of us at BART, I extend my warmest regards for a productive legislative year.

Sincerely,

James Fang
 President

JAMES FANG
 PRESIDENT

JOEL KELLER
 VICE-PRESIDENT

THOMAS E. MARGRO
 GENERAL MANAGER

DIRECTORS

DAN RICHARD
 1ST DISTRICT

JOEL KELLER
 2ND DISTRICT

ROY NAKADEGAWA
 3RD DISTRICT

MARGARET K. PRYOR
 4TH DISTRICT

PETER W. SNYDER
 5TH DISTRICT

THOMAS M. BLALOCK
 6TH DISTRICT

WILLIE B. KENNEDY
 7TH DISTRICT

JAMES FANG
 8TH DISTRICT

TOM RADULOVICH
 9TH DISTRICT

1998 Report to *Congress*



**San Francisco Bay Area
Rapid Transit District**