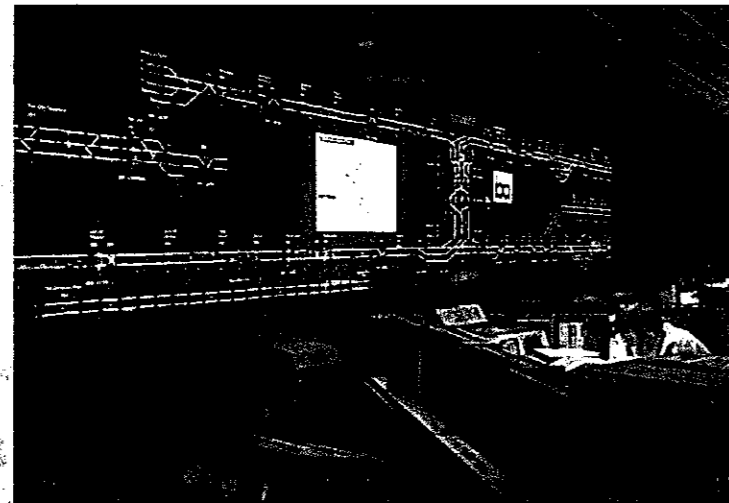


# SYSTEMS OPERATION

When BART opened the first computer-operated rapid rail system over 25 years ago, it set new industry standards for advanced transit technology and premier customer service. As BART moves into the 21st century, it is prepared to meet the needs of an expected 70,000 new passengers daily, with its state-of-the-art Operations Control Center (OCC). Located at BART's Lake Merritt Headquarters facility in Oakland, California, the OCC is the nerve center of BART Systems Operations. The OCC performs BART's most crucial supervisory roles including monitoring train control operations, electrification, ventilation, and management of support facilities and passenger information systems. The OCC was modernized in 1994 to incorporate advanced computer imaging and graphic projection display systems. The software and display board will be expanded to include the four new stations of the BART-SFO Airport Extension, providing passengers with the safe, reliable, and on-time service that they have come to expect.



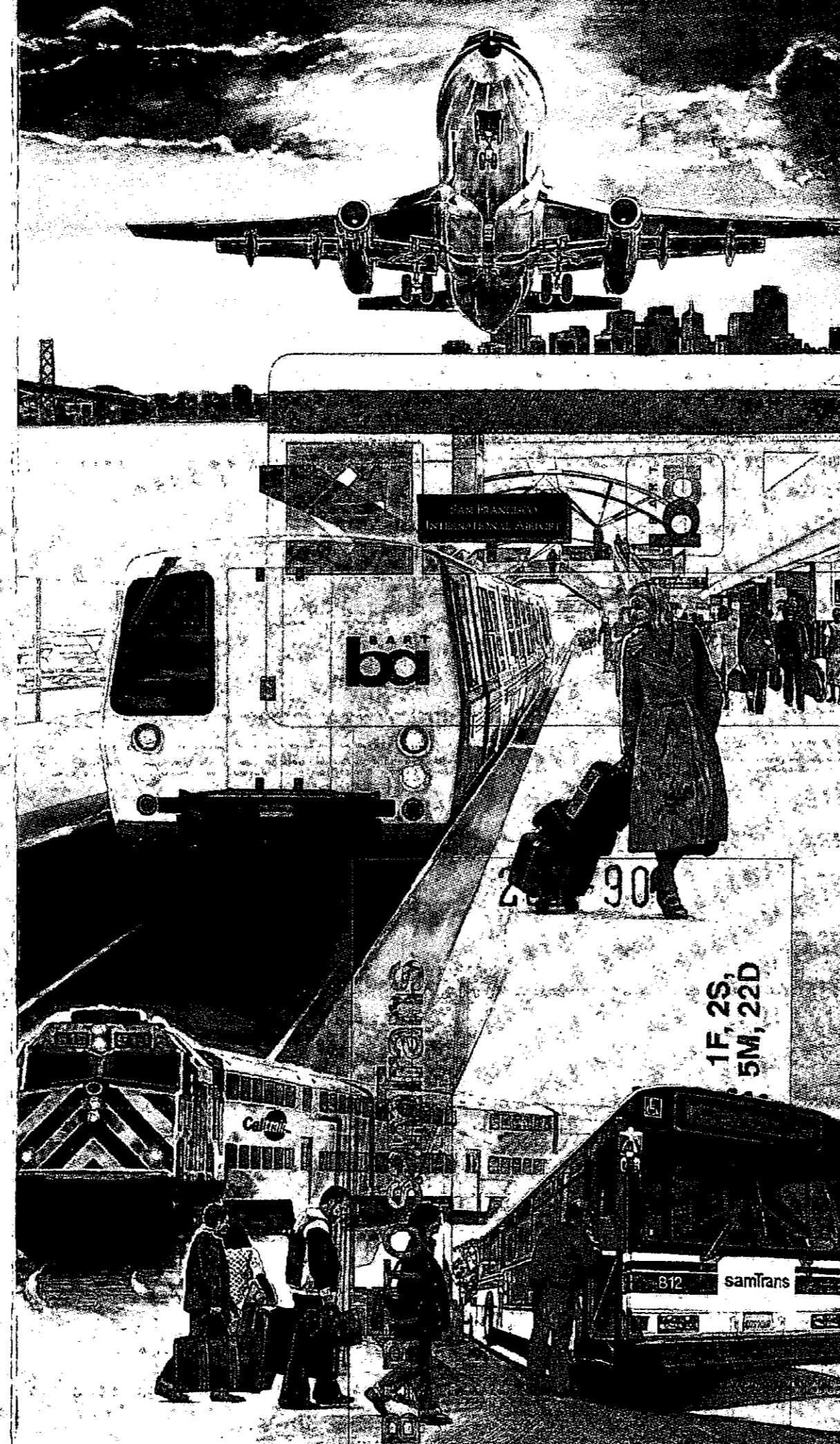
A look inside the state-of-the-art Operations Control Center

## PROJECT BENEFITS

- Provides direct rapid transit service to the world's seventh busiest airport
- Results in a 180-mile regional rail system by linking the Bay Area's two commuter rail operators
- Triples BART ridership on the San Francisco Peninsula
- Eliminates 10,000 auto trips per day to the airport
- Reduces regional traffic congestion, fuel consumption and air pollution
- Contributes to improving local roadways, intersections and major freeway interchanges
- Encourages new transit-related economic development in host cities
- Fosters partnerships with local government through joint-use facilities
- Generates thousands of new temporary and permanent jobs

## LOOKING TOWARD THE FUTURE

By connecting the area's businesses, neighborhoods, travel centers, and recreational facilities, the project will bind communities more closely, creating new job opportunities and extending quick and convenient access to the San Francisco International Airport. As the new millennium approaches, the completion of the BART-SFO Airport Extension promises to boost the local regional economy, make access to domestic and international travel easier, and add to the quality of life in the San Francisco Bay Area.



## PROJECT FEATURES

- Four new stations
- 8.7 miles of new passenger track
  - 6.5 miles subway
  - 1.2 miles aerial
  - 1.0 miles at-grade
- Projected extension ridership of nearly 70,000 trips by 2010
- Direct transit link to world's seventh busiest airport
- First cross-platform connection between commuter rail and rapid rail systems west of the Mississippi

# BART-SFO AIRPORT EXTENSION



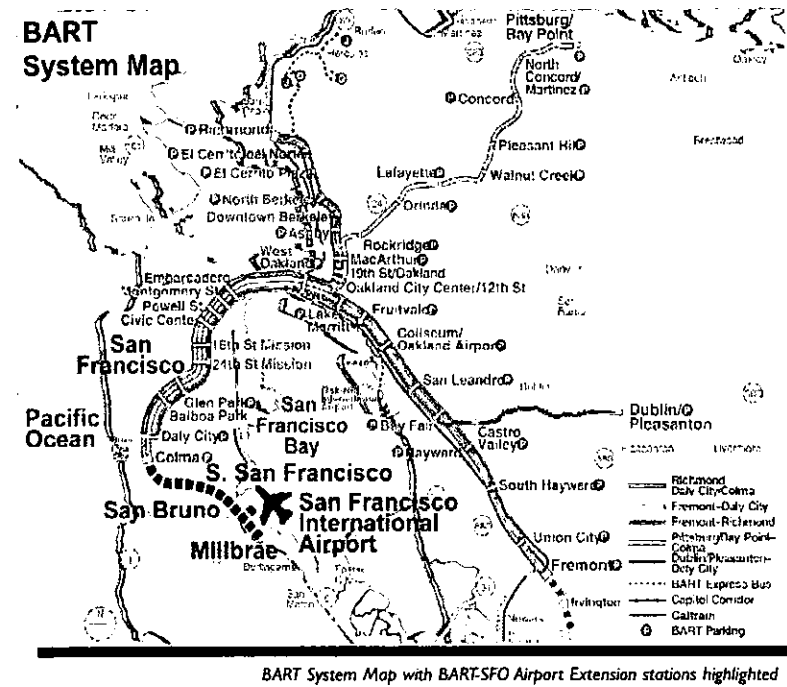
Making the Bay Connection

24-hour "InfoLine"  
650-689-8365

BART-SFO Airport Extension Project  
979 Broadway  
Millbrae, California 94030

Website  
www.bart.org

# A VISIONARY CONCEPT BECOMES REALITY

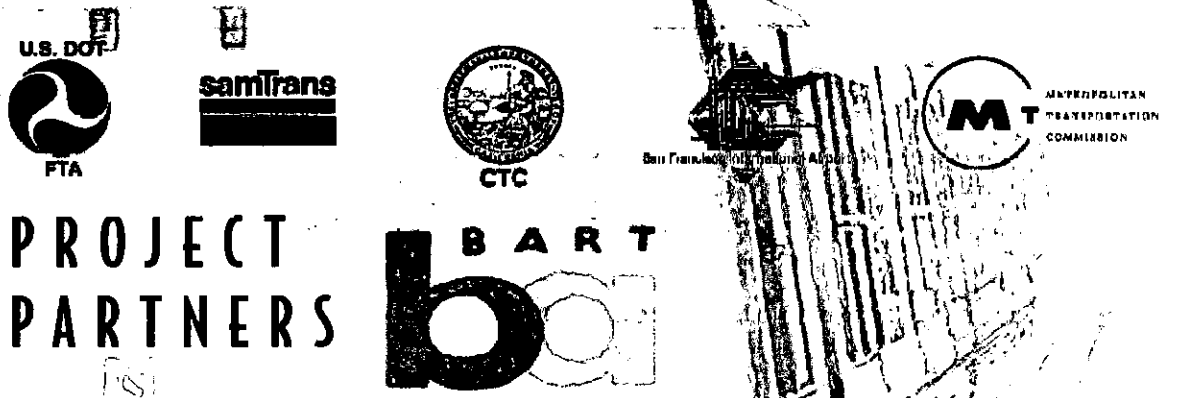


The idea of connecting the San Francisco Bay Area Rapid Transit District (BART) to San Francisco International Airport (SFO) received its first serious attention 25 years ago. In 1972, the same year the BART system opened for revenue service, the *San Francisco Airport Access Project* report recommended linking BART to SFO, thereby connecting communities on the San Francisco Peninsula with those in the East Bay and San Francisco. The report's far-sighted recommendation is finally being realized in the BART-SFO Airport Extension project.

In 1991, the BART Extensions Program initiated Phase I of a \$2.6 billion program to extend its service

into communities in Alameda, Contra Costa, and San Mateo counties. Between 1991 and 1997, BART added five stations and 21 miles, creating a total system of 93 miles of double track and 39 stations.

During the next phase of construction, BART will move further down the San Francisco Peninsula, adding 8.7 miles of new track and four new stations, including a station located inside the airport at the new International Terminal. The BART-SFO Airport Extension project broke ground in 1997 and is scheduled for completion early in the new century.



The BART-SFO Airport Extension is being financed through a \$750 million Federal Full Funding Grant Agreement, and is also receiving \$99 million from San Mateo County Transit District, \$108 million from the California Transportation Commission, \$10 million from the Metropolitan Transportation Commission, and up to \$200 million from San Francisco International Airport. The project has the

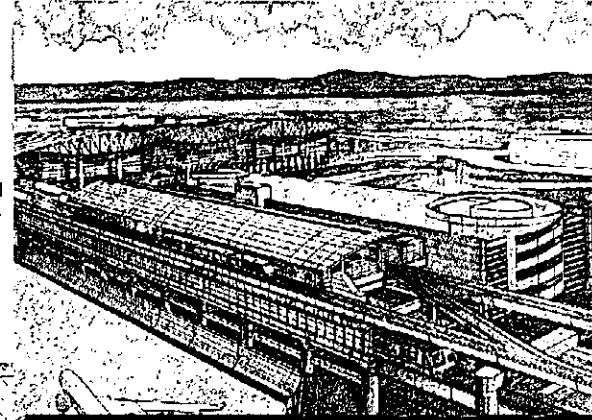
strong support of state and local elected officials, including the entire Bay Area congressional delegation, and has been hailed as the state's number one transportation priority. The most important project partners are the local communities that have voted for ballot measures supporting the project, and who will host the new stations in their neighborhoods.

## FOUR NEW STATIONS

Extending BART to the airport will add 8.7 miles of new track to the existing system and new stations in South San Francisco, San Bruno, and Millbrae, with one station in San Francisco International Airport, located inside the new International Terminal. Three stations are in preliminary design; design on the airport station is complete. The Millbrae Station—largest of the four—will connect BART's rapid rail system with Caltrain's commuter rail system via a shared central platform, creating the first such intermodal station west of the Mississippi. The linking of the two lines will create a continuous 180-mile rail route and is expected to significantly increase ridership on both systems. New station designs were guided by BART's exacting Passenger Service Quality Standards, approved by both the BART and SamTrans Boards of Directors, to ensure the highest level of customer satisfaction. All stations have been designed to maximum standards allowing total access for all passengers.

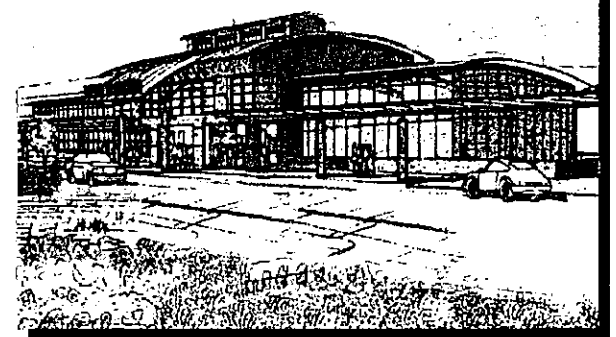
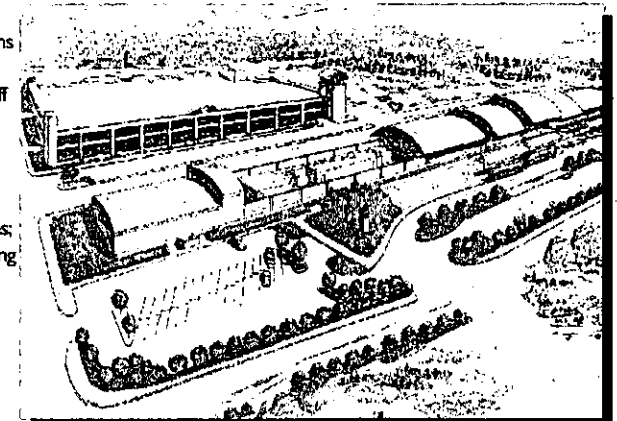
### International Airport Terminal Station (Concourse H)

The San Francisco International Airport Station will be connected to the new International Terminal. The approximately 100,000 square foot BART station will be constructed in an aerial configuration. The station platform will be located approximately 44 feet above ground, at the departure level of the International Terminal (currently under construction). Most passengers exiting BART will be within a five-minute walk of check-in counters. For those passengers traveling further, the Airport Rail Transit system (ART), which will circle the airport's other destinations, is located one level above the BART platform and is accessible via escalator.



### South San Francisco

The South San Francisco Station will occupy 15 acres of land, between El Camino Real and Mission Road. Passengers will be able to reach the station via Hickey Boulevard Extension and a new access street. The current station design features an at-grade concourse with access to SamTrans buses, and a passenger drop-off area. The concourse also includes fare collection and supporting facilities; the center boarding platform and station are below ground.



### San Bruno

The San Bruno Station will be located on Huntington Avenue, occupying 12 acres immediately adjacent to the Tarfon Park Shopping Center. The current station design features an at-grade concourse with access to SamTrans buses and a passenger drop-off area. The concourse also includes fare collection and supporting facilities and a below-ground station with a center platform. A new plaza will connect the station with the shopping center.



### Millbrae Intermodal Station

The Millbrae Intermodal Station will be located at the intersection of Millbrae Avenue and Rollins Road, just off Highway 101, occupying 15 acres in a mixed-use area. The current station design features a central platform for transfer between the BART and Caltrain systems and a concourse-level bridge for patron circulation and supporting facilities. The station will provide access to SamTrans buses and a passenger drop-off area. Station plans incorporate new roadways and landscaping.



Groundbreaking ceremony, November 1997

## CONSTRUCTION

### Design-Build Contracts

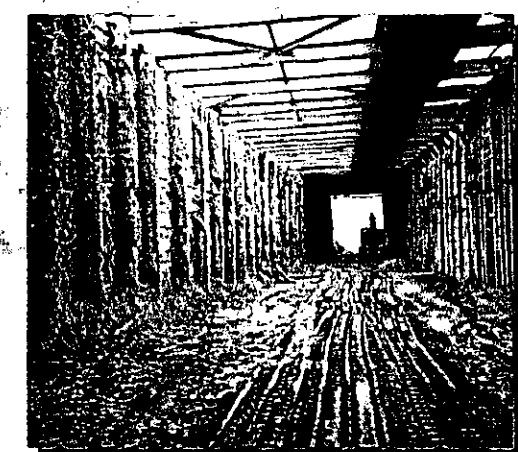
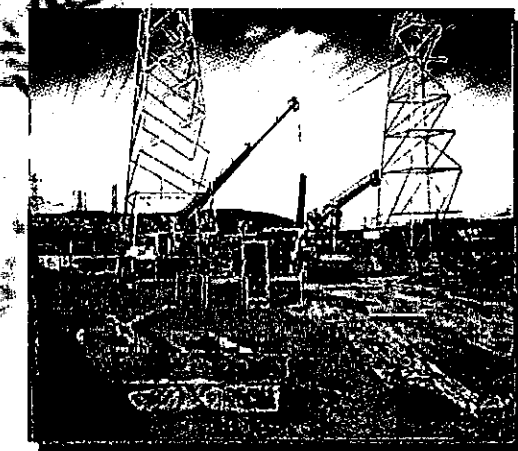
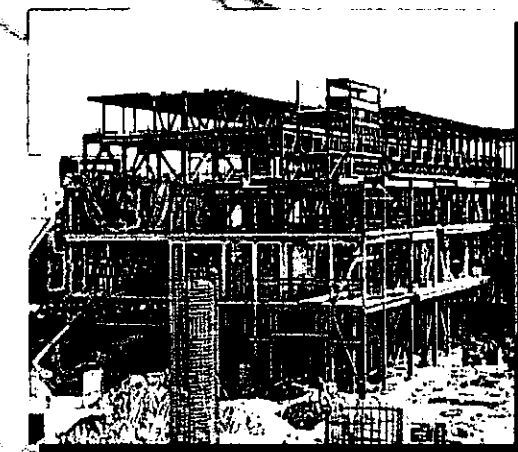
The BART extension to San Francisco International Airport was selected by the Federal Transit Administration (FTA) as one of the four turnkey demonstration projects authorized by the Intermodal Surface Transportation Efficiency Act of 1991. These projects demonstrate how cost and time savings may be achieved through innovative contracting. BART will build the stations, line, track, and systems simultaneously using the "Design-Build" concept, allowing the same contractor that completes the design to also perform construction. Savings in cost and time will result primarily from decreasing the number of prime contractors—the airport extension will be built with just five major construction contracts. This contracting strategy is crucial for BART to fulfill its aggressive building schedule.

### Project Challenges

A public works project the size and complexity of the BART-SFO Airport Extension will pose many interesting challenges. The project is being constructed through densely populated residential areas, highly developed commercial and industrial zones, and in areas of environmentally sensitive terrain. The BART-SFO Airport Extension is defining a new standard in state-of-the-art public works engineering and operations.

- **Construct near operating railroad.** Construction of the line and the Millbrae Intermodal Station will take place within 15 feet of the existing operating Caltrain commuter rail, which currently runs 66 trains a day.
- **Build near San Andreas fault.** Because the BART system is located near California's earthquake-prone San Andreas Fault, the entire project will be built to the maximum standards for safely withstanding seismic disturbances.

- **Construct aerial tracks in wetlands area.** Construction will occur in the environmentally sensitive area west of Bayshore wetlands. BART is implementing a comprehensive environmental program to ensure the safety of endangered species in this area.
- **Coordinate construction with Airport.** SFTA will construct the BART station on airport property. BART will closely monitor SFTA's progress to ensure construction and system integration.
- **Build subway through seven cemeteries.** The BART alignment route follows an abandoned railroad right-of-way passing 1.5 miles through seven cemeteries in Colma. No burial sites will be disturbed during construction, and BART will take special care to respect the cemetery environment.
- **Preserve historic bridge.** An arched hand-cut stone bridge lying directly in the path of construction, designed and built by the Southern Pacific Transportation Company in 1863, is an important historical landmark which BART will protect and preserve.
- **Execute nearly 150 agreements.** BART will oversee adherence to numerous agreements with municipal, federal, state, and local agencies and entities. The agreements focus on construction issues, utility relocations, maintenance responsibilities, and financial considerations.
- **Acquire over 350 parcels.** BART is maintaining a federally approved real estate acquisition program. The program is designed to accommodate the extension's aggressive Design-Build schedule.



Please note that the renderings of the South San Francisco Station, the San Bruno Station, and the Millbrae Intermodal Station are preliminary.