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Report to the Chairman, Subcommittee on Transportation, Committee on Appropriations, House of Representatives

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MASS TRANSIT

Actions Needed for the BART Airport Extension

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Resources, Community, and
Economic Development Division

B-270493

May 31, 1996

The Honorable Frank R. Wolf
Chairman, Subcommittee on Transportation
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

The Bay Area Rapid Transit District (BART) intends to spend over $1.1 billion, including $750 million in federal funds, to extend mass transit service to the San Francisco International Airport. The project is controversial, encountering both widespread support and opposition in the San Francisco Bay area. The controversy, which includes concerns over the project's environmental impacts and cost, has resulted in two redesigns of the project since 1992. Before the Federal Transit Administration (FTA) can provide BART with the funds requested, federal law requires FTA to ensure that BART complies with federal environmental laws and develops a viable financing plan.

Concerned about the overall cost of the project, you asked us to describe (1) the actions the FTA must take before agreeing to fund the project, (2) the project's current schedule and estimated cost and the factors that could affect them, and (3) the project's finance plan, including assumptions that could affect its viability.

Results in Brief

Although the Department of Transportation (DOT) has announced its intention for FTA to sign a funding agreement with BART, FTA must provide a number of assurances before the agreement can be concluded. Specifically, FTA must ensure that BART has developed sound environmental plans and secured the necessary financing to build the project. In addition, FTA has been requested by the House and Senate Appropriations Committees to certify that BART's environmental and finance plans are reasonable and determine if various alternatives have been adequately considered to meet the San Francisco Bay area's future transportation needs. The Committees requested that FTA submit the certification 60 days before signing a funding agreement. BART and FTA are working to resolve the Committees' concerns; however, it is unclear if all of the issues will be resolved by August 1996—60 days before the date BART expects FTA to sign a funding agreement in October 1996.

BART estimates that its extension to the airport will cost $1.167 billion. Construction is expected to begin by October 1996 and the line is projected to open in October 2000. BART's schedule is ambitious. Whether or not BART can begin the project by October 1996 and complete construction within the estimated cost depends on whether (1) environmental reviews—the final environmental impact statement (EIS) and wetlands permit—are complete, (2) the use of innovative construction procedures will produce the expected savings and (3) BART has adequately included contingencies and cost escalations in estimating the project's total cost.

BART's April 1996 draft finance plan states that $750 million in federal appropriations would be needed to complete the project. The remaining $417 million of the project's cost would come from the San Francisco airport, the state, and local sources. Four assumptions in the finance plan could affect its viability. First, the project's borrowing costs could grow should BART not receive federal appropriations of between $51 million and $121 million each year for the next 7 fiscal years. Second, the California state legislature must amend BART's statute to allow BART to pledge its own revenues as a source of collateral for a borrowing program. BART must establish a borrowing program because expenses are expected to exceed revenues during the height of construction and produce cash shortfalls of up to $240 million. Third, the San Francisco airport, which has pledged up to $200 million for the project, has yet to identify how it intends to fund its contribution—either through revenue bonds, passenger facility charges, or the use of federal funds from the Airport Improvement Program. Finally, all of the remaining state and local contributors face financial limitations that have capped their current pledges to the BART project.

Background

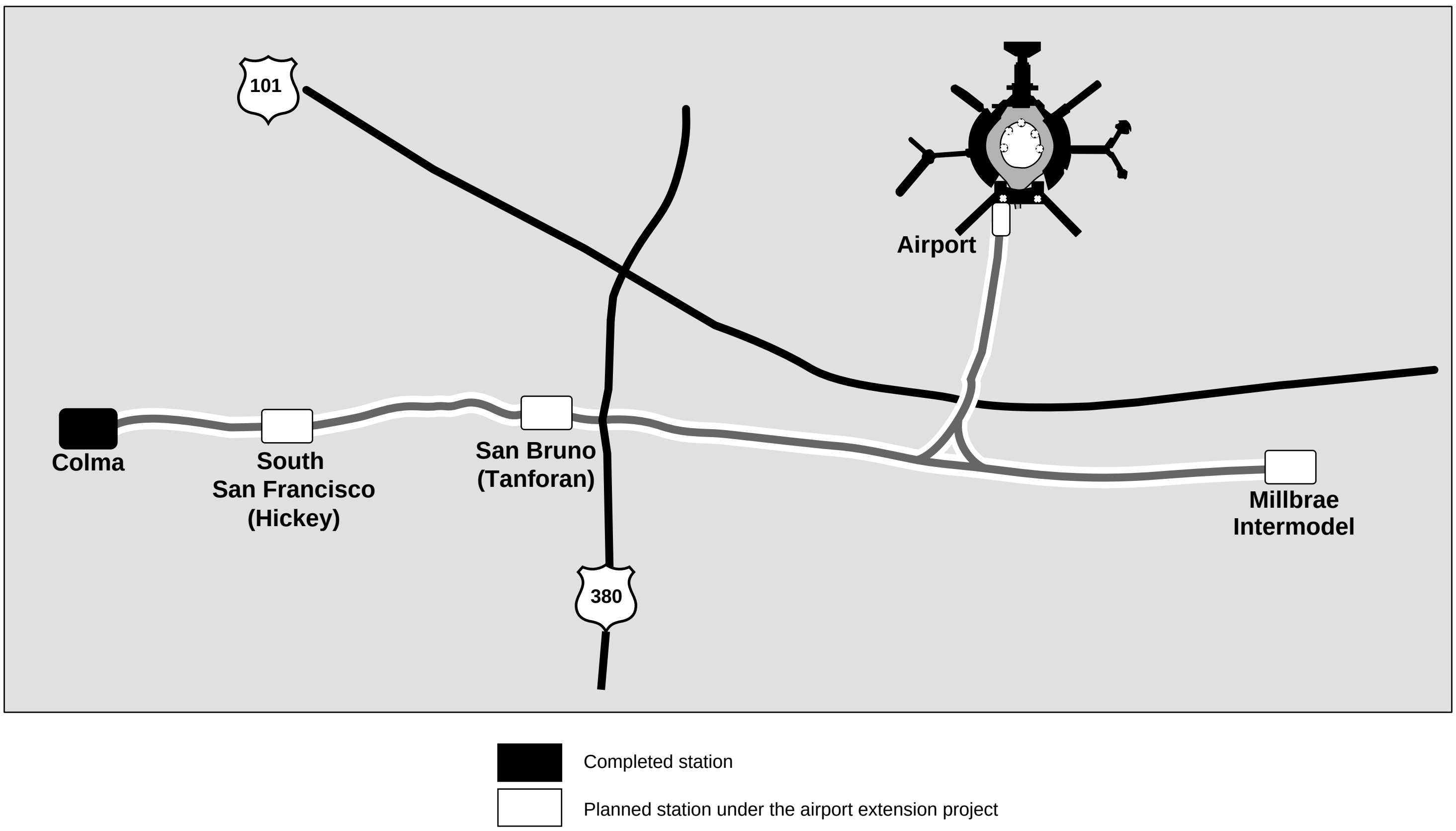
The BART rail system covers over 70 miles and serves more than 70 million annual riders throughout four counties in the San Francisco Bay area. Dating back to the opening of the BART system in 1972, transportation planners envisioned a system that would bring travelers and airport employees into the San Francisco International Airport. These plans began to take shape in 1991, when the Congress authorized an extension of the BART system to the airport as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). In the act, the Congress authorized $568,500,000 for two BART projects and one light rail project in Santa Clara county. The act directed the Secretary of Transportation to fully fund the BART airport extension project, and if necessary, use the unobligated balance in the Mass Transit Account of the Highway Trust Fund.

In 1992, the Bay Area's Metropolitan Transportation Commission (MTC) completed the first of three draft EISs for the project. As a result, local transit agencies selected an alternative that proposed to link together BART's and Caltrain's (the commuter rail operator's) systems and the airport, at one intermodal location west of the airport. The estimated cost of this alternative was $960 million. However, local opposition to environmental impacts and concerns over ridership forecasts required a study of new alternatives. Subsequently, BART took the lead in preparing a new draft EIS and in April 1995 selected an alternative that would bring the BART system directly into the airport via a subway. The estimated cost of this alternative was $1.27 billion.[1] While this alternative mitigated some of the concerns about environmental impacts and ridership, there was continued opposition to the project. The airport objected to the impacts that the proposed subway's construction would have on the airport, and the House and Senate Conference Committee report accompanying DOT's fiscal year 1996 appropriations expressed concerns about the project's cost.

As a result, BART developed new alternatives and studied them in a third draft EIS. In September 1995, BART selected a new preferred alternative, which changed the project's entrance into the airport from a subway to an aerial (elevated track) approach. The current project consists of about 8 miles of straight mainline track running south from the existing end of the BART line at the city of Colma to the city of Millbrae, with an incorporated "Y-stub" aerial line diverging from the mainline track and running southeast into the airport, then southwest out of the airport to Millbrae (see fig. 1). The aerial line would include a transit station adjacent to a planned international air terminal and would be linked to the airport's light rail system to circulate passengers through the airport. Besides the airport and Millbrae stations, the project would include the Hickey and the Tanforan station north of the airport. Under this option, BART has reduced the estimated cost to $1.167 billion, primarily from savings associated with eliminating the more costly subway option.

[1]The 1992, April 1995, and current estimates are not comparable because they are not in same-year dollars.

Figure 1: The BART Extension to the San Francisco International Airport



The overall purpose of the BART airport extension is to help relieve existing and anticipated highway congestion and improve air quality in the region. The traffic on local highways, including Interstate 280, Interstate 380, and Highway 101 regularly exceeds the existing capacity. For 1990 to 2010, MTC forecasts a 16-percent increase in traffic between San Francisco and counties in the South Bay area, including a 52-percent increase in traffic to and from the airport. San Francisco International Airport is proceeding with a $2.3 billion expansion and projects its annual passengers will increase by 21 million between 1990 and 2006. In addition, the San Francisco Bay area has been unable to meet federal air quality standards. The BART extension to the airport is one of the key transportation related antipollution measures. Recognizing growth in the region, the governor of California, on April 29, 1996, designated the BART airport extension project as one of the state's top three transportation priorities.

FTA Must Review the Finance Plan and Answer Congressional Concerns Before Signing a Full Funding Grant Agreement

While DOT has announced its support for a full funding grant agreement, key activities remain before FTA can sign one. The agreement will establish the terms and conditions for federal participation, including the total amount of federal transit funds for the project. However, before signing the agreement, FTA must ensure that BART has met all environmental requirements and developed an adequate finance plan. In addition, a Conference Committee report has requested that FTA certify to the House and Senate Appropriations Committees that BART's environmental and finance plans are reasonable and determine if various transit alternatives have been considered to meet the Bay area's future transportation needs.

On March 13, 1996, DOT announced its intention for FTA to sign a full funding grant agreement with BART for the proposed extension to the airport. This announcement was supported in the administration's fiscal year 1997 budget request, which included $51 million for BART. FTA's Circular C5200 on full funding grant agreements states that the agency generally expects to enter into such an agreement within 120 days after the conclusion of the environmental process, which is marked by the issuance of the final EIS and a record of decision. The application for a full funding grant agreement includes certain key features, including a description of the project and its scope, a finance plan, an estimate of baseline costs and the schedule for completing the project, the schedule for receiving federal funds, and a description of environmental mitigation measures. The finance plan must demonstrate that BART and other local entities have the financial capacity to build, operate, and maintain the project.

Before signing the full funding grant agreement, FTA must first approve the final EIS. Second, BART and FTA must complete negotiations on the project's finance plan—based on BART's April 1996 draft plan. To assist it, FTA is employing outside consultants to assess BART's construction costs and the viability of the finance plan. Under its planned construction schedule, BART expects to have the finance plan approved and to receive a full funding grant agreement from FTA by October 1996.

Finally, the Conference Committee report accompanying DOT's fiscal year 1996 appropriations act requests FTA to certify in writing to the Congressional Appropriations Committees that the project has resolved a number of significant issues. The report requests that this certification be delivered 60 days before the administration signs a full funding grant agreement with BART. To answer the concerns cited in the Conference Committee report, FTA must certify that

- a final cost analysis and finance plan have been completed and reviewed and that the federal share for the project has been reduced,[2]
- the final EIS has been completed and approved,
- a study to consider a direct commuter rail (Caltrain's) link to the airport has been considered in conjunction with the BART project, and
- the share of cost to be borne by the airport and its users is consistent with federal transportation policy and regulations.

BART and FTA are working to resolve the Appropriations Committees' concerns. However, it is unclear if all of the issues will be resolved by August 1996—60 days before the date BART expects FTA to sign a full funding grant agreement. As discussed in the following two sections, FTA and BART have many issues to resolve before FTA can provide the Appropriations Committees with the requested certifications.

BART's Construction Schedule and Cost Estimates

In its April 1996 draft finance plan, BART estimated that the project would cost $1.167 billion, construction would begin by October 1996, and revenue operations would begin in October 2000. Three issues remain that may affect BART's ability to begin the project as scheduled and complete construction within the estimated cost: (1) whether environmental reviews, including the final EIS and a wetlands permit, will be complete before October 1996; (2) whether the use of innovative contracting procedures will produce the expected savings; and (3) whether BART has adequately included contingencies and cost escalations in estimating the project's total cost.

BART Is Finalizing the EIS and Seeking Environmental Clearances

BART has obtained approval from the U.S. Fish and Wildlife Service (the Service) and must complete two additional environmental reviews before FTA can approve the project. The two issues must be resolved before construction can begin. BART must (1) resolve concerns expressed about the draft EIS and complete the final EIS and (2) obtain a wetlands permit from the U.S. Army Corps of Engineers (the Corps). Delays in finalizing the EIS or obtaining the permit could delay the October 1996 startup.

[2]The House Appropriations Committee was concerned about the cost of the subway alignment, for which the federal share was $800 million.

Federal law required BART to obtain the Service's approval of measures to mitigate the project's impacts on endangered species.[3] The project will directly impact the habitat of the San Francisco Garter Snake (a federally listed endangered species) and the California Red Legged Frog[4] (a federally listed threatened species), both which live on the airport's property that will be used for part of the project's construction. Since March 1995, BART has been coordinating with the Service to develop and finalize plans for mitigating impacts to the snakes' and frogs' habitat and in January 1996 submitted a mitigation proposal to the Service. On May 20, 1996, the Service issued an opinion of "no jeopardy" on the project's impact to both species. The Service found that BART's mitigation plan, which included enhancing the snakes' and frogs' habitat at a location several miles from the construction area, was acceptable for ensuring the continued existence of the species.

In September 1995, BART issued a second supplemental draft EIS.[5] In the draft statement, BART changed the project's entry into the airport from a subway to an aerial approach, thereby responding to a congressional request to reduce the project's cost and the impacts that construction would have on the airport. In November 1995, the boards of directors of BART and the San Mateo County Transit District (SAMTRANS) adopted this approach as the locally preferred alternative. BART held public hearings on the new alternative and received 800 comments on the draft statement. According to BART's schedule, it plans to receive FTA's approval for the final EIS by June 14, 1996, and expects FTA to issue the record of decision by mid-August 1996. Under regulations implementing the National Environmental Policy Act, during this time FTA must provide a 30-day public comment period; BART must assess and incorporate any comments received; and FTA must review and assess the comments and how BART responded to them. According to FTA officials, they expect to issue the final EIS in early June 1996.

Finally, federal law requires BART to obtain a section 404 wetlands permit from the Corps.[6] As with the requirements for protecting endangered species, BART must develop a plan for mitigating the project's impacts to

[3] 16 U.S.C. section 1536.

[4] The California Red Legged Frog is the primary food source of the San Francisco Garter Snake.

[5] A supplemental EIS is required when significant new information or changed circumstances make data in a prior EIS incomplete. Two supplemental drafts have been prepared to assess additional alternatives.

[6] 33 U.S.C. section 1344.

wetlands. The amount of wetlands affected is about 1 acre. BART has been coordinating with officials from the Corps and submitted a permit application in February 1996. According to BART, the Corps has provided preliminary agreement on its wetlands mitigation plan. However, a final permit cannot be issued until after FTA approves the final EIS and signs a record of decision for the project. Corps officials stated that a permit could be issued by September 1996. Construction affecting the wetlands cannot begin until the Corps issues the wetlands permit. BART's schedule for completing these reviews, as well as securing the environmental permits and obtaining a full funding grant agreement appears in appendix I.

BART Project Includes Innovative Contracting Procedures

The BART airport extension is one of four nationwide projects selected by FTA in response to ISTEA's requirement that the agency demonstrate the benefits of using innovative contracting procedures to reduce the project's time and cost. Since this project is intended as a demonstration, little empirical evidence currently exists to confirm the 15- to 20-percent cost savings BART has assumed it will realize from using the innovative procedures known as design-build contracting. BART has built into each of the design-build contracts an 18.5-percent contingency amount for cost increases. As described below, much of the cost savings stems from reducing construction time. But these savings could be offset by higher borrowing costs should federal appropriations be less than specified in BART's draft finance plan.

According to BART officials, design-build is an emerging method for implementing construction of new rail transit systems and has the capacity to save significant time and money. Under conventional procurement, a public agency is typically responsible for managing a project from planning to completion. Most of the project's elements are segmented into components (contracts) that are separately bid and administered through the design, construction, testing, and startup phases by the agency. Design-build procurement in the public sector refers to a process whereby a public agency awards a single master contract to a private firm for the final design, construction, and startup of a public works project. After certification that the project is complete, the contractor turns the keys over to the agency.

According to BART officials, the reduced costs from using the design-build approach are obtained primarily by reducing the construction time and administrative costs. On the airport extension project, BART estimates that one-third less time will be needed to construct the project as a result of awarding only four design-build contracts rather than using multiple conventional contracts. BART estimates that it will complete the project in about 50 months, beginning in October 1996. In comparison, on BART's recent $1.2 billion project under which two new stations opened since last year and three additional stations will open this year, BART used conventional procedures, which will require about 78 months to complete, and awarded 50 major contracts. Extrapolating from this experience, BART projected that for the airport extension project a design-build approach would reduce costs by 15 to 20 percent over conventional procedures.

However, FTA officials stated that since the BART airport extension project is intended to demonstrate any potential cost savings derived from design-build procedures, it would be difficult to predict the exact savings from employing this method. A 1994 report, prepared for FTA, on design-build projects stated that although the use of the method is very common for transit projects outside of North America, the North American experience is limited and has provided mixed results.[7]

In addition, the cost savings from the design-build procedures are time-dependent; that is, the method assumes that with fewer contracts, BART can complete the project in less time. Less time means less money needed. However, the shorter construction period also requires BART's financial contributors to provide larger contributions over a shorter period of time. As discussed in the next section on BART's finance plan, BART anticipates that federal appropriations for the project will increase from the $10 million for fiscal year 1996 to between $50 million and $121 million each year for fiscal years 1997 through 2003. Should these appropriation levels not materialize, the cost of the project would increase because BART would have increased borrowing costs. Any cost savings derived from the design-build approach could thereby be offset.

Contingencies and Cost Escalations

Because of the scale and risk of the project, BART has added on to construction and design estimates 18.5 percent for the four design-build contracts. These amounts for contingencies and cost escalations—totaling approximately $107 million—are included in the project's overall cost of $1.167 billion. In addition, BART has included a separate $80 million contingency amount specified as a line item in its finance plan, resulting in a total of $187 million for contingencies. In commenting on BART's finance plan, FTA found that BART's contingency amounts were low on the basis of

[7]Booz, Allen & Hamilton Inc., Evaluation of Houston's Turnkey Experience (July 1994).

past experiences with other transit projects. FTA recommended an additional contingency funding source and a contingency level higher than 18.5 percent to cover potentially higher environmental costs for mitigating the impacts on wetlands and for connecting the project to the airport terminal. In commenting on a draft of our report, BART stated that surcharges collected at its Daly City station would be set aside in a capital reserve account to cover unexpected cost growth beyond the project's $1.167 billion budget. These surcharges would generate $2 million a year. If additional funds are needed, premium surcharges could be imposed for trips at the airport station. These surcharges could generate $3 million to $4 million each year but would not be available until the airport station opened in 2000.

These additional funds may be needed to cover a potential $40 million cost escalation not included in BART's finance plan. In an April 1996 report on BART's cost estimates, FTA's project management oversight consultant found that BART calculated its costs based on a midpoint of construction in 1997. The consultant stated that BART should have used 1999 as the midpoint of construction. As a result, BART's cost estimate for the project does not account for 2 additional years of anticipated inflation and is therefore understated by $40 million.

The Project's Financing

BART's April 19, 1996, draft finance plan, specifies the level and timing of the contributions the transit agency expects to receive from FTA and state and local contributors. Specifically, the plan anticipates that the federal government will provide funding of $750 million. BART anticipates finalizing agreements with the state, the San Francisco airport, and other regional transit agencies to provide the $417 million local share. From our review of the finance plan and our discussions with officials from FTA, the airport, regional transit agencies, and the state, we have identified four factors that could affect the plan's viability. First, although BART's finance plan assumes that the Congress will appropriate $51 million to $121 million annually for the next 7 fiscal years, FTA has advised BART to revise its plan and lower the appropriation levels expected each year. As a result, the project's borrowing costs will increase. Second, BART must secure changes in California law to facilitate establishing a borrowing program to cover expected cash shortfalls. Third, the airport has not identified the source of funding it will use to meet its $200 million commitment to the project. And, fourth, all of the remaining local contributors face financial limitations that have capped their current pledges.

Federal Funds Are Expected to Provide Two-Thirds of the Project's Financing; Cash Shortfalls Are Also Expected

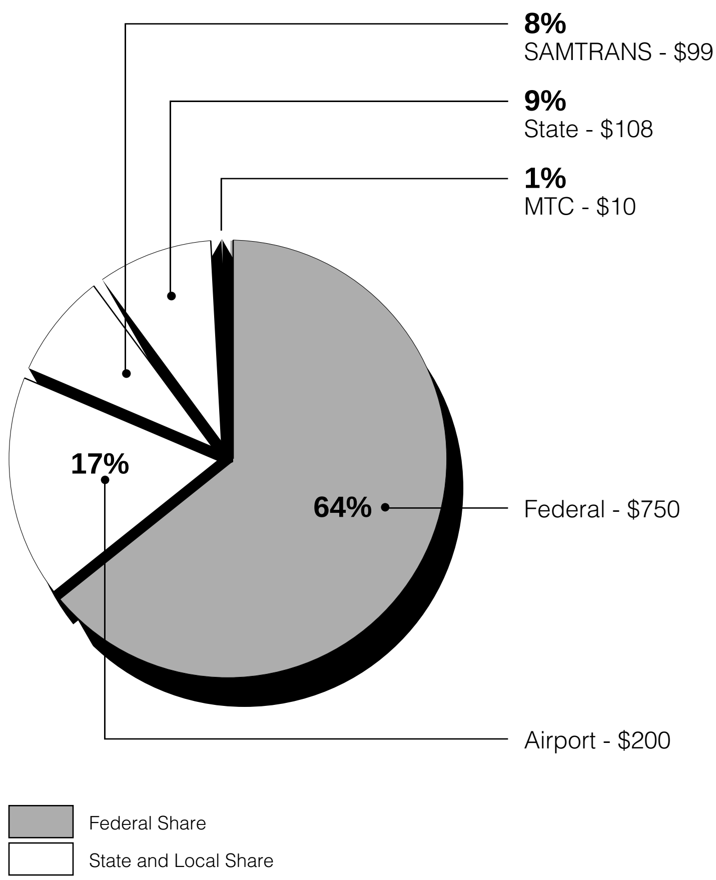
Federal funds are expected to cover about two-thirds of the total cost for the project—approximately $750 million. Despite this large federal share and the commitment of local contributors, the accelerated construction pace will result in BART's incurring expenses more quickly than it will receive funding. As a result, BART will experience cash shortfalls of up to $240 million during the 50 months of construction. This situation will require it to borrow funds to fill the gap between revenues and expenses. BART is working to develop a borrowing program to address the revenue gap, including securing a second source of collateral to back up the expected federal appropriations.

Figure 2 shows the funding sources for the BART project. The $750 million federal contribution includes $40 million in interest costs associated with BART's need to issue debt to finance cash shortfalls occurring during construction. BART expects additional funds from the airport ($200 million), the state ($108 million), SAMTRANS ($99 million), and MTC ($10 million). BART cannot contribute to the capital costs of the project, since it is precluded by state legislation from making expenditures for extending service or facilities outside the geographic boundaries of its district until it fulfills certain commitments within its original district.[8] According to BART officials, the agency will not have fulfilled these commitments before completing the airport extension project.

Appendix II displays BART's April 1996 draft finance plan for the airport extension. The finance plan shows that federal contributions will continue after revenue operations for the project begin in fiscal year 2000 and construction ends in fiscal year 2001. This is because BART will be using federal funds received in fiscal years 2002 and 2003 to pay back principal and interest from debt (short-term notes) that it must issue during construction. BART must issue the debt because construction will be completed over 50 months but financing will be stretched over 84 months. As BART spends funds for construction faster than it receives them, a cash shortfall will result. The largest shortfall is $240 million in fiscal year 2000.

[8]BART's service district comprises San Francisco, Alameda, and Contra Costa counties. The airport extension will be constructed in San Mateo County.

Figure 2: Funding Sources for the BART Extension to the San Francisco International Airport



Dollars in millions

Note: The percentages do not total to 100 percent because of rounding.

Source: GAO's summary of data from BART.

FTA's financial advisers stated that BART's request for appropriations of $120 million in the later years of the finance plan represent 18 percent of the total $660 million in FTA's current annual budget for the New Starts program. Accordingly, FTA advised BART to reevaluate the finance plan by assuming a lower level of annual federal funding. In its April 1996 revised plan, BART assumed lower federal appropriations for the early years of the project but higher federal appropriations in the last 3 years. BART also reduced the interest rate it assumed it would have to pay for its borrowing program from 6.25 percent to 5.5 percent. The annual level of federal appropriations and the assumed interest rate can affect BART's borrowing costs. Table 1 compares BART's current finance plan to funding scenarios that vary the level of federal appropriations and the interest rate. FTA has advised BART that borrowing costs are federally reimbursable. However, in commenting on the draft of our report, FTA stated that the federal contribution for the BART project will be capped at $750 million; BART would bear any and all expenses beyond those identified in the grant agreement as necessary to complete the project. The federal contribution will be finalized in the grant agreement, which is still subject to negotiation between FTA and BART.

Table 1: Interest Costs Associated With Different Funding Options

Dollars in millions

Funding scenario	Appropriations	Borrowing costs (at 5.5% interest rate)	Borrowing costs (at 6.25% interest rate)
BART's finance plan	$51.1 in year 1 $70-$110 in years 2-4 $120 in years 5-7	$40.0	$45.4
President's FY 1997 request and equal appropriations in FY 1998-2004	$51.1 in year 1 $90.5 in years 2-8	$46.4	$52.7
President's FY 1997 request and equal appropriations in FY 1998-2005	$51.1 in year 1 $79.2 in years 2-9	$61.0	$69.3
President's FY 1997 request and variable appropriations in FY 1998-2001	$51.1 in year 1 Rising to $294.2 in FY 1999	0	0

Source: GAO's analysis of data from BART.

With different federal appropriations and interest rates, BART's borrowing costs could increase from its current estimate of $40 million to about $70 million should federal appropriations be provided over a longer time than the 7 years in BART's plan. In contrast, BART could incur no borrowing costs if it received federal appropriations over 5 years, with a peak appropriation of $294 million in fiscal year 1999. Appendix III provides further details on these different financing scenarios.

State Legislation Needed to Establish Borrowing Program for the Airport Extension

BART does not have the authority to pledge its own revenues as a secondary source of collateral for a borrowing program it must establish to meet the expected cash shortfalls. As mentioned earlier, California state law prohibits BART from using its own revenues for the purpose of extending service or facilities outside its district. While the expected federal funds would serve as the primary source of collateral for the issued notes, BART's financial consultant advised the agency that it would need a secondary source of collateral to obtain a lower financing rate. As of May 15, 1996, BART was working to secure support in the California legislature to allow it to pledge its revenues as collateral. BART expects the legislation to pass, since it has support of key state legislators.

BART has identified the potential surcharges at the airport station and Daly City station as the source of its collateral for the project. According to BART, the proposed legislation would also allow it to pay for cost overruns exceeding the planned contingency funds, as described earlier. Without the change in state law, BART proposes to either take out a mortgage on some of its transit facilities or rely only on future federal appropriations as the source of collateral. According to BART's financial advisers, these two options would increase BART's financing rate by one-half to 1 percent.

Limitations on the Use of Airport Funds

The San Francisco International Airport Commission has committed up to $200 million for the BART airport extension.[9] Airport officials described their commitment as the maximum contribution for the BART project. As of May 15, 1996, the Airport Commission had not determined the source of funds it would use to pay for that portion of the BART project located on the airport's property—the aerial structure and mass transit terminal. FTA's financial advisers stated that since the airport's contribution represents 17 percent of the project's total cost, FTA should closely monitor BART's process for obtaining a firm financial commitment from the airport.

In August or September 1996, BART expects to secure a comprehensive agreement with the Airport Commission specifying the airport's financial participation in the project. Airport officials stated that revenue bonds or passenger facility charges (PFC) were potential sources of funds and that

[9]In BART's finance plan, the airport's contribution is divided between $87 million that would be included in the full funding grant agreement and $113 million that the airport would pay independently.

the outcome of negotiations with the airlines would determine the funding source. Airport officials stated that the airport was financially strong and would meet its financial commitment to BART within the Federal Aviation Administration's (FAA) guidelines.

The airport's contribution would be limited in accordance with a March 3, 1995, memorandum by FAA outlining how airport resources could be used for the BART extension project and what types of activities could be funded. FAA found that the construction of the BART terminal itself at the airport would be eligible for funding by the Airport Improvement Program (AIP) or the airport could institute PFCs if it retained ownership of the facility. In addition, other airport revenues could be used for the BART terminal. FAA stated that the line into the airport would be ineligible for AIP or PFC funds because the line would not be for the exclusive use of airport patrons. However, the airport could use other revenue sources, such as bonds, to partially pay for the line. FAA's memorandum was written before the project was redesigned from including a subway to including the current aerial configuration. BART officials believe that the new configuration would address FAA's concerns, since the redesigned line would be used solely for airport patrons. However, according to the manager of FAA's district office, the airport has not requested a decision from FAA on whether the new configuration would in fact address the agency's concerns and be fully eligible for AIP or PFC funds.

The airport's contribution is also limited by a position stated by the Mayor of San Francisco in a March 27, 1996, letter to BART. In the letter, the Mayor states that the airport will not pay for any BART construction activities west of Highway 101 (the highway that provides primary access to the airport). The "Y" portion of the BART project would be affected by the mayor's limitation, since this portion of the project is located on the airport's property but the airport would be precluded from funding this portion. The Mayor wrote the letter because of his concerns that the airport's contribution to pay for this portion of the BART project would jeopardize revenues the city receives each year from the airport.

Limitations on Local and State Funding

The BART airport extension will be constructed largely in San Mateo County—south of San Francisco. Because San Mateo County is not in BART's service district, SAMTRANS—the county's mass transit operator—entered into an agreement with BART whereby it will contribute $330 million to various BART projects (including $99 million for the airport extension) in exchange for BART service into the county. SAMTRANS officials stated that the $99 million was the most that they could commit to the construction of the project. In addition, SAMTRANS' Board of Directors stated that it would not assume responsibility for cash-flow financing and cost overruns during the project's construction.

SAMTRANS will also pay for the operation and maintenance of the airport extension line. According to SAMTRANS officials, the operating costs will be recaptured through passenger fares and surcharges; provisions for these charges have been included in their agreement with BART. Reports by FTA indicate that SAMTRANS has the financial capacity to fund the $99 million contribution to BART.

The California Transportation Commission has pledged $98 million in state transportation funds for the project. According to Commission officials, the original funding source, the state's Transit Capital Improvement Fund, is experiencing constraints because of the volatility in gasoline tax revenues and variation in the amount of the gasoline tax the legislature allocates to transportation. While Commission officials stated that the Transit Capital Improvement Fund may not have sufficient balances to fully fund the BART project in the future, the Commission reaffirmed its $98 million commitment to the project in a January 1996 letter to us, explaining that State Transportation Improvement Program funds already allocated for a different BART project could be transferred to the airport extension.

A second planned source of state funds will come from revenues generated from a tax passed in 1990, known as Proposition 116. Commission officials stated that $10 million in state Proposition 116 funds will be allocated to the BART airport extension, as agreed to by San Mateo County. No additional Proposition 116 funds would be available for the project.

Conclusions

The BART extension to the airport is at a critical point in terms of the need for close oversight by FTA and congressional scrutiny of the project. BART's timetable for beginning construction by October 1996 is ambitious and highly dependent on the expeditious approval of critical environmental mitigation and finance plans by FTA. BART's finance plan provides little room for error. It depends on large annual federal appropriations, cost savings derived from new contracting procedures, and state approval to help secure debt financing.

Agency Comments

We provided a draft of this report to FTA and BART for review. We met with FTA officials, including the Director of the Office of Planning, to discuss their comments on the draft. In general, FTA officials considered the report to be a fair representation of the facts related to the BART airport extension project. FTA stated we should stress that the BART project is the product of sound regional transportation planning and a high priority in the region and the state. FTA also suggested that we emphasize the benefits of the proposed project in reducing traffic congestion, particularly since additional congestion is expected as a result of the airport's expansion. We believe the report clearly indicates how the current project was developed, the strong level of regional and state support, and the project's benefits in reducing traffic congestion.

The FTA officials stated that design-build contracting procedures should be characterized as new, rather than unproven, methods for containing cost growth. The purpose of the demonstration project is to determine whether this contracting method will, in fact, help contain costs for large transit projects. We revised the report to characterize design-build procedures as a new, rather than unproven, contracting method. The FTA officials also suggested technical and editorial changes to the report. Where appropriate, we incorporated these changes into the report.

BART provided written comments on our draft report. Overall, BART stated that the draft report in large part accurately represented the facts associated with the proposed airport extension project. However, BART did not concur with the opinions we reached in our "Results in Brief" and "Conclusions" sections. For example, BART did not agree with our characterization of design-build as an unproven contracting method for transit projects. BART also disagreed with our conclusions that its timetable for the project was very ambitious and that its finance plan had little room for error. As explained, we revised the report to characterize design-build as a new, rather than unproven, contracting method. However, we continue to believe that BART's timetable is ambitious, particularly since BART expects FTA to sign a full funding grant agreement by October, yet FTA has not approved the final EIS, the airport will not identify its funding commitment until September, and FTA has yet to certify to the Appropriations Committees that the project has resolved a number of significant issues. We also continue to believe that the finance plan has little room for error because state legislation has not yet been amended to allow BART to pledge its assets as collateral, limited funding sources are available to cover cost growth beyond the project's $1.167 billion budget and contingency amounts, and BART may not have adequately escalated the costs to cover 2 years' worth of inflation (about $40 million). BART's detailed comments and our responses are found in appendix V.

We performed our review from October 1995 through May 1996 in accordance with generally accepted government auditing standards. To accomplish our objectives, we gathered information from BART and FTA officials in San Francisco and Washington, D.C. Appendix IV contains the details of our scope and methodology.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 14 days after the date of this letter. At that time, we will send copies to the Secretary of Transportation, the Administrator of FTA; the General Manager, BART; cognizant congressional committees, and other interested parties. Copies will also be available upon request.

Please contact me at (202) 512-2834 if you or your staff have any questions. Major contributors to this report are listed in appendix VI.

Sincerely yours,

John H. Anderson, Jr.
Director, Transportation and
Telecommunications Issues

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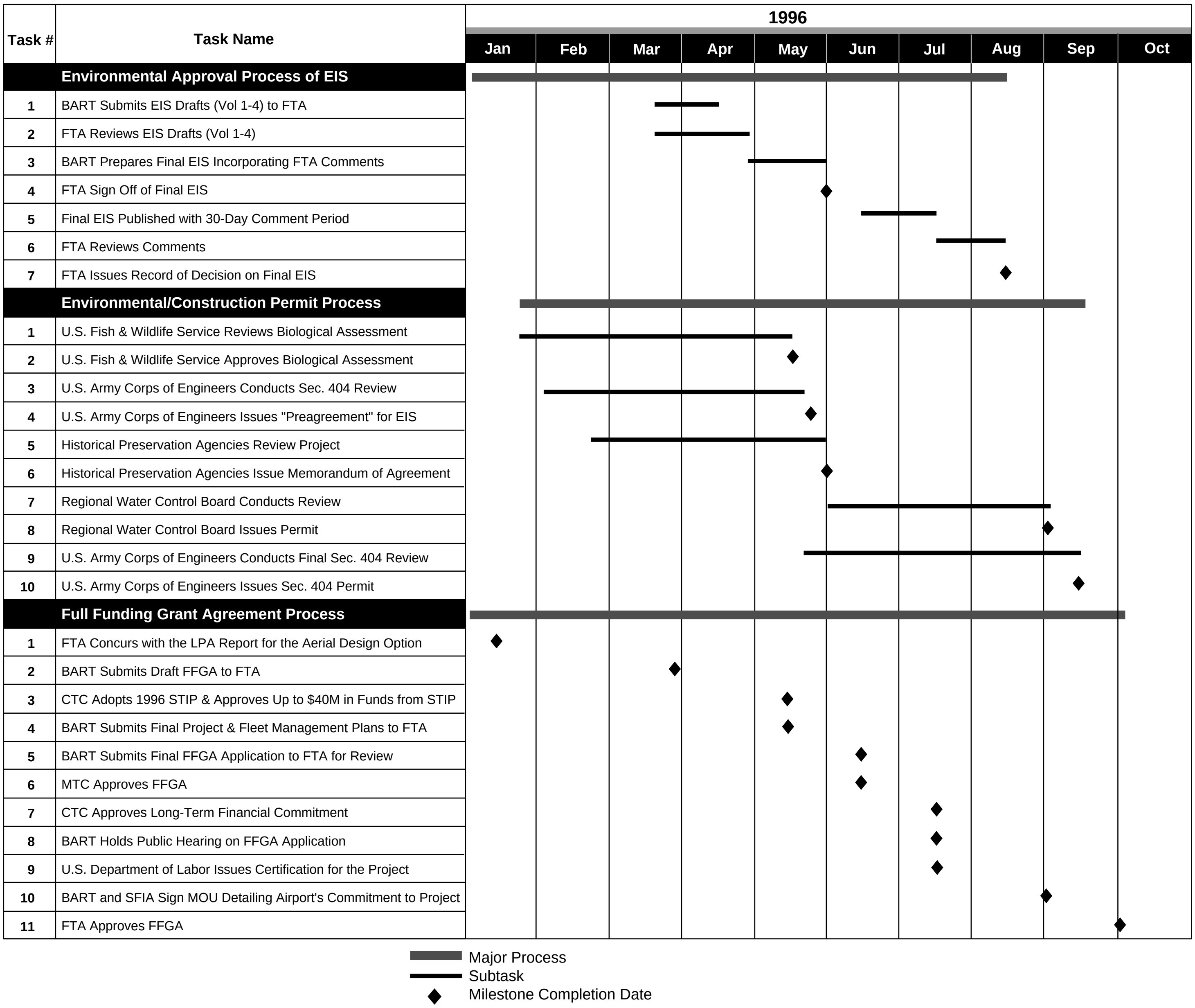
Abbreviations

AIP	Airport Improvement Program
BART	Bay Area Rapid Transit
CTC	California Transportation Commission
DOT	Department of Transportation
EIS	environmental impact statement
FAA	Federal Aviation Administration
FFGA	full funding grant agreement
FTA	Federal Transit Administration
GAO	General Accounting Office
ISTEA	Intermodal Surface Transportation Efficiency Act
LPA	locally preferred alternative
MOU	memorandum of understanding
MTC	Metropolitan Transportation Commission
PFC	passenger facility charge
PMOC	project management oversight consultant
SAMTRANS	San Mateo County Transit District
SFIA	San Francisco International Airport
STIP	State Transportation Improvement Program

Bay Area Rapid Transit District's Schedule and Milestones for the Airport Extension Project



(Figure notes on next page)

Legend

BART = Bay Area Rapid Transit District
EIS = environmental impact statement
FTA = Federal Transit Administration
LPA = locally preferred alternative
FFGA = full funding grant agreement
MTC = Metropolitan Transportation Commission
CTC = California Transportation Commission
STIP = State Transportation Improvement Program
SFIA = San Francisco International Airport
MOU = memorandum of understanding

Source: GAO's analysis of documents from BART.

BART's Draft Finance Plan (April 1996)

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$70,000	$90,000
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$169,400**	**$153,700**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$363,991**	**$517,691**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$1,961**	**($202,229)**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$11,128**

Amounts, by fiscal year						
2000	2001	2002	2003	2004	2005	Total
$110,000	$121,000	$121,000	$121,430	$0	$0	$750,000
26,079	0	0	0	0	0	$98,000
0	0	0	0	0	0	$10,000
2,000	0	0	0	0	0	$10,000
17,400	17,400	0	0	0	0	$87,000
0	0	0	0	0	0	$99,000
$155,479	**$138,400**	**$121,000**	**$121,430**	**$0**	**$0**	**$1,054,000**
$27,090	$22,290	$0	$0	$0	$0	$168,000
0	0	0	0	0	0	$126,000
137,000	55,200	0	0	0	0	$620,000
30,000	22,500	0	0	0	0	$100,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$673,170	**$811,570**	**$932,570**	**$1,054,000**	**$1,054,000**	**$1,054,000**	
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
($240,840)	**($202,430)**	**($81,430)**	**$40,000**	**$40,000**	**$40,000**	
$13,252	**$11,139**	**$4,481**	**$0**	**$0**	**$0**	**$40,000**

Notes: The $40 million dollars in financing costs are covered in the federal contribution to the project.

BART's finance plan assumes a yearly financing rate of 5.5026 percent.

Various Financing Scenarios Assuming Different Levels of Federal Appropriations

Table III.1: Financing Scenario That Uses BART's Financing Plan and a Borrowing Rate of 6.25 Percent

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$70,000	$90,000
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$169,400**	**$153,700**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$363,991**	**$517,691**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$1,961**	**($202,229)**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$12,639**

Amounts, by fiscal year 2000	2001	2002	2003	2004	2005	Total
$110,000	$121,000	$121,000	$121,430	$0	$0	$750,000
26,079	0	0	0	0	0	$98,000
0	0	0	0	0	0	$10,000
2,000	0	0	0	0	0	$10,000
17,400	17,400	0	0	0	0	$87,000
0	0	0	0	0	0	$99,000
$155,479	**$138,400**	**$121,000**	**$121,430**	**$0**	**$0**	**$1,054,000**
$27,090	$22,290	$0	$0	$0	$0	$168,000
0	0	0	0	0	0	$126,000
137,000	55,200	0	0	0	0	$620,000
30,000	22,500	0	0	0	0	$100,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$673,170	**$811,570**	**$932,570**	**$1,054,000**	**$1,054,000**	**$1,054,000**	
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
($240,840)	**($202,430)**	**($81,430)**	**$40,000**	**$40,000**	**$40,000**	
$15,053	**$12,652**	**$5,089**	**$0**	**$0**	**$0**	**$45,433**

Notes: The borrowing rate that BART used for its calculations in its draft finance plan was 5.5026 percent. The finance plan mentioned that the rate could be as high as 6.25 percent, which is the rate used for this scenario.

Because of rounding, amounts may add to slightly different cumulative values, financing costs, and totals than the ones shown.

Table III.2: Financing Scenario That Includes the President's Fiscal Year 1997 Budget Request and Then Assumes Level Appropriations From Fiscal Year 1998 Through Fiscal Year 2004

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$90,490	$90,490
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$189,890**	**$154,190**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$384,481**	**$538,671**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$22,451**	**($181,249)**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$9,973**

Amounts, by fiscal year						
2000	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**
$90,490	$90,490	$90,490	$90,490	$90,490	$0	$750,000
26,079	0	0	0	0	0	$98,000
0	0	0	0	0	0	$10,000
2,000	0	0	0	0	0	$10,000
17,400	17,400	0	0	0	0	$87,000
0	0	0	0	0	0	$99,000
$135,969	**$107,890**	**$90,490**	**$90,490**	**$90,490**	**$0**	**$1,054,000**
$27,090	$22,290	$0	$0	$0	$0	$168,000
0	0	0	0	0	0	$126,000
137,000	55,200	0	0	0	0	$620,000
30,000	22,500	0	0	0	0	$100,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$674,640	**$782,530**	**$873,020**	**$963,510**	**$1,054,000**	**$1,054,000**	
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
($239,370)	**($231,470)**	**($140,980)**	**($50,490)**	**$40,000**	**$40,000**	
$13,172	**$12,737**	**$7,758**	**$2,778**	**$0**	**$0**	**$46,418**

Notes: This scenario uses the borrowing rate that BART used for its calculations in its draft finance plan, 5.5026 percent.

Because of rounding, amounts may add to slightly different cumulative values, financing costs, and totals than the ones shown.

Table III.3: Financing Scenario That Includes the President's Fiscal Year 1997 Budget Request and Then Assumes Level Appropriations From Fiscal Year 1998 Through Fiscal Year 2004, With a Borrowing Rate of 6.25 Percent

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$90,490	$90,490
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$189,890**	**$154,190**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$384,481**	**$538,671**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$22,451**	**($181,249)**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$11,328**

Amounts, by fiscal year						
2000	2001	2002	2003	2004	2005	Total
$90,490	$90,490	$90,490	$90,490	$90,490	$0	$750,000
26,079	0	0	0	0	0	$98,000
0	0	0	0	0	0	$10,000
2,000	0	0	0	0	0	$10,000
17,400	17,400	0	0	0	0	$87,000
0	0	0	0	0	0	$99,000
$135,969	**$107,890**	**$90,490**	**$90,490**	**$90,490**	**$0**	**$1,054,000**
$27,090	$22,290	$0	$0	$0	$0	$168,000
0	0	0	0	0	0	$126,000
137,000	55,200	0	0	0	0	$620,000
30,000	22,500	0	0	0	0	$100,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$674,640	**$782,530**	**$873,020**	**$963,510**	**$1,054,000**	**$1,054,000**	
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
($239,370)	**($231,470)**	**($140,980)**	**($50,490)**	**$40,000**	**$40,000**	
$14,961	**$14,467**	**$8,811**	**$3,156**	**$0**	**$0**	**$52,722**

Note: Because of rounding, amounts may add to slightly different cumulative values, financing costs, and totals than the ones shown.

Table III.4: Financing Scenario That Includes the President's Fiscal Year 1997 Budget Request and Then Assumes Level Appropriations From Fiscal Year 1998 Through Fiscal Year 2005

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$79,179	$79,179
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$178,579**	**$142,879**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$373,170**	**$516,049**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$11,140**	**($203,872)**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$11,218**

Amounts, by fiscal year	2000	2001	2002	2003	2004	2005	Total
	$79,179	$79,179	$79,179	$79,179	$79,179	$79,179	$750,000
	26,079	0	0	0	0	0	$98,000
	0	0	0	0	0	0	$10,000
	2,000	0	0	0	0	0	$10,000
	17,400	17,400	0	0	0	0	$87,000
	0	0	0	0	0	0	$99,000
	$124,658	**$96,579**	**$79,179**	**$79,179**	**$79,179**	**$79,179**	**$1,054,000**
	$27,090	$22,290	$0	$0	$0	$0	$168,000
	0	0	0	0	0	0	$126,000
	137,000	55,200	0	0	0	0	$620,000
	30,000	22,500	0	0	0	0	$100,000
	$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
	$640,706	**$737,285**	**$816,464**	**$895,643**	**$974,821**	**$1,054,000**	
	$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
	($273,304)	**($276,715)**	**($197,536)**	**($118,358)**	**($39,179)**	**$40,000**	
	$15,039	**$15,227**	**$10,870**	**$6,513**	**$2,156**	**$0**	**$61,022**

Notes: This scenario uses the borrowing rate that BART used for its calculations in its draft finance plan, 5.5026 percent.

Because of rounding, amounts may add to slightly different cumulative values, financing costs, and totals than the ones shown.

Table III.5: Financing Scenario That Includes the President's Fiscal Year 1997 Budget Request and Then Assumes Level Appropriations From Fiscal Year 1998 Through Fiscal Year 2005, With a Borrowing Rate of 6.25 Percent

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$79,179	$79,179
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$178,579**	**$142,879**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$373,170**	**$516,049**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$11,140**	**($203,872)**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$12,742**

Amounts, by fiscal year						
2000	2001	2002	2003	2004	2005	Total
$79,179	$79,179	$79,179	$79,179	$79,179	$79,179	$750,000
26,079	0	0	0	0	0	$98,000
0	0	0	0	0	0	$10,000
2,000	0	0	0	0	0	$10,000
17,400	17,400	0	0	0	0	$87,000
0	0	0	0	0	0	$99,000
$124,658	**$96,579**	**$79,179**	**$79,179**	**$79,179**	**$79,179**	**$1,054,000**
$27,090	$22,290	$0	$0	$0	$0	$168,000
0	0	0	0	0	0	$126,000
137,000	55,200	0	0	0	0	$620,000
30,000	22,500	0	0	0	0	$100,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$640,706	**$737,285**	**$816,464**	**$895,643**	**$974,821**	**$1,054,000**	
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
($273,304)	**($276,715)**	**($197,536)**	**($118,358)**	**($39,179)**	**$40,000**	
$17,081	**$17,295**	**$12,346**	**$7,397**	**$2,449**	**$0**	**$69,310**

Note: Because of rounding, amounts may add to slightly different cumulative values, financing costs, and totals than the ones shown.

Table III.6: Financing Scenario That Includes the Appropriations Needed to Fund the Design-Build Project With No Borrowing Costs

Dollars in thousands

	Through 1994	1995	1996	1997	1998	1999
Revenues						
Federal Transit Administration	$22,500	$33,000	$10,000	$51,070	$68,039	$294,190
State transportation funds	14,561	0	5,060	7,300	20,000	25,000
State Proposition 116 funds	0	0	0	10,000	0	0
West Bay Bridge tolls	0	1,000	1,000	2,000	2,000	2,000
San Francisco Airport	0	0	0	17,400	17,400	17,400
San Mateo matching funds	14,561	0	0	5,139	60,000	19,300
Total revenues	**$51,622**	**$34,000**	**$16,060**	**$92,909**	**$167,439**	**$357,890**
Expenses						
Engineering and management	$8,467	$14,115	$22,318	$22,540	$24,940	$26,240
Right-of-way	0	0	0	37,800	50,400	37,800
Construction	0	0	0	18,800	141,400	267,600
Vehicles	0	0	0	3,750	17,500	26,250
Total expenses	**$8,467**	**$14,115**	**$22,318**	**$82,890**	**$234,240**	**$357,890**
Cumulative revenues	**$51,622**	**$85,622**	**$101,682**	**$194,591**	**$362,030**	**$719,920**
Cumulative expenses	**$8,467**	**$22,582**	**$44,900**	**$127,790**	**$362,030**	**$719,920**
Cumulative balance	**$43,155**	**$63,040**	**$56,782**	**$66,801**	**$0**	**$0**
Annual financing costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

2000	2001	2002	2003	2004	2005	Total
Amounts, by fiscal year						
$148,611	$82,590	$0	$0	$0	$0	$710,000
26,079	0	0	0	0	0	$98,000
0	0	0	0	0	0	$10,000
2,000	0	0	0	0	0	$10,000
17,400	17,400	0	0	0	0	$87,000
0	0	0	0	0	0	$99,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$27,090	$22,290	$0	$0	$0	$0	$168,000
0	0	0	0	0	0	$126,000
137,000	55,200	0	0	0	0	$620,000
30,000	22,500	0	0	0	0	$100,000
$194,090	**$99,990**	**$0**	**$0**	**$0**	**$0**	**$1,014,000**
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
$914,010	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	**$1,014,000**	
$0	**$0**	**$0**	**$0**	**$0**	**$0**	
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Scope and Methodology

To determine what actions FTA must take before issuing a full funding grant agreement, we reviewed the Federal Transit Act, as amended, FTA's Circular C5200 on full funding grant agreements, and the National Environmental Policy Act. We also interviewed FTA legal counsels in headquarters and Region 9, FTA headquarters and Region 9 program officials, and BART officials responsible for project management. To determine congressional requirements placed on FTA regarding the BART airport extension, we reviewed federal legislation and the relevant Conference Committee report.

To describe the project's current schedule and estimated cost and factors that could affect the cost, we interviewed officials at FTA Region 9 and BART, and we reviewed cost information contained in each of the draft EISs, the report on the locally preferred alternative, and reports by BART's financial consultant. We also reviewed project and construction schedules submitted to FTA by BART. We reviewed reports from FTA's financial consultant for the project, FTA's annual reports, and oversight documents by Region 9 officials. In addition, we reviewed information from critics of the project, including local transportation agency officials; transportation planners; and industry, environmental, and transit user groups. To assess BART's progress in meeting environmental requirements needed to begin construction, we interviewed officials from FTA, BART, the U.S. Fish and Wildlife Service, and the Army Corps of Engineers. In addition to reviewing each draft EIS, we reviewed the biological assessment for endangered species.

To describe the project's financing plan, we interviewed officials at FTA and each of the local agencies involved in the project's financing, including BART, the San Mateo County Transit District, the San Francisco International Airport, the California Transportation Commission, and the Metropolitan Transportation Commission. We obtained and reviewed documents from these officials regarding their financial contribution to the plan. To further assess the airport's contribution to the plan, we obtained the Federal Aviation Administration's (FAA) guidance on allowable costs and interviewed FAA officials. We also reviewed analyses of BART's commercial borrowing program that were contained in reports from BART's financial consultant.

Comments From BART

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

BART

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May 23, 1996

Mr. John H. Anderson Jr.
Director, Transportation and Telecommunications Issues
United States General Accounting Office (GAO)
Washington, D.C. 20548

Dear Mr. Anderson:

I would like to thank you for providing the San Francisco Bay Area Rapid Transit District (BART) with the opportunity to submit written comments on the May 17, 1996 draft of the GAO's proposed report entitled Mass Transit: Actions Needed For BART Airport Extension (GAO/RCED-96-176). In conjunction with the Federal Transit Administration (FTA), Metropolitan Transportation Commission (MTC), San Mateo County Transit District (SamTrans), and the San Francisco International Airport Commission (SFIA), BART has prepared comments which are summarized below and are documented in greater detail in the attachments to this transmittal.

Our intent in developing these comments was to provide the GAO with the most complete and up-to-date information on the rapidly evolving status of the proposed BART-San Francisco Airport Extension. BART is pleased that the draft GAO report acknowledges the aggressive timetable needed to develop this nationally significant intermodal project. A BART Airport Extension would not only realize the vision developed in ISTEA, but it will also respond to the very real challenges posed by a seventy percent increase in SFIA travel demand and the continued economic expansion of the Pacific Rim.

I. Coordination with San Francisco International Airport

See comment 1.

* The report fails to stress the urgency of coordinating the BART project's construction with that of the San Francisco International Airport's (SFIA) Master Plan Improvement Program. Since the SFIA program is already underway, the BART project must move forward immediately or the "window of opportunity" to build the BART station and trackway on Airport property could close.

* The SFIA has committed up to $200 million for on-Airport design and construction of BART facilities. In accordance with their mutual agreements, the SFIA advised the airlines in early March 1996 of its intention to expend Airport funds for the BART project beginning in the Fall of 1996. Following the expiration of a six-month notification period in early September 1996, the SFIA will be free to make such expenditures whether or not the airlines object.

* While restrictions defined by the FAA and the existing lease agreements between the SFIA and the airlines may limit uses of certain SFIA revenues, the portion of the BART project which is east of the western boundary of

John H. Anderson Jr.
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Highway 101 can be funded from the variety of revenue sources available to the SFIA.

See comment 2.

II. Environmental Process

* The US Fish and Wildlife Service issued a "no-jeopardy" opinion on the project's impact on endangered species on May 20, 1996.

* The US Army Corps of Engineers has provided preliminary agreement on the wetlands mitigation plan proposed by BART in its Section 404 application.

* The FTA has provided comments on the FEIS and is scheduled to provide its final signoff by May 31, 1996.

* The current schedule calls for Certification of the FEIR/Project adoption on June 18th (by BART) and June 19th (by SamTrans) and closure of the NEPA Public availability period on July 15th leading to a FTA Record of Decision shortly thereafter.

See comment 3.

III. Cost Estimates

* The Design/Build contracting procedure is not an experimental procedure. It has been very successful in improving project delivery for both public sector and private sector construction projects. In fact, BART itself has had successful experience with several Design/Build contracts. Furthermore, the failure of the two federally sponsored Design/Build rail projects cited in the draft GAO report was unrelated to their contracting procedures.

* BART's "controlled" Design/Build implementation plan is more conservative than that employed in the private sector because BART's Design/Build bid documents would be prepared to a 50 to 60 percent design level, if not higher. In the private sector such bid documents are generally prepared to a less than 30 percent design level. This "controlled" Design/Build plan has been reviewed by a Blue Ribbon panel of industry experts, which determined that BART's proposed contracting method is consistent with the best current practices in the construction industry.

* The FTA's Project Management Oversight Consultant (PMOC) has concluded in a recently published report that BART's cost principles are sound and have been properly applied to the development of construction estimates. This PMOC report, furthermore, describes BART's overall cost estimates for both construction and non-construction items as being "generally reasonable and realistic."

* A 18.5 percent ($107 million) design or estimating contingency was included in the cost of the proposed BART project's four design-build contracts to cover uncertainty related to the level of design of project facilities. This contingency was **not** included to reflect a lack of confidence in the Design/Build procedure's ability to generate savings in administrative costs. An additional $80 million project contingency is included as a separate line item to address other unforeseen conditions. These contingencies total $187 million, or 43 percent of the construction budget.

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See comment 4.

IV. Financing Plan

* The project's full funding grant agreement (FFGA) will not include any provision which allows the FTA's participation to increase beyond $750 million. The federal government's share of project financing costs is included within this $750 million.

* The estimate of federal appropriations to the project was provided to BART by FTA headquarters with the Office of Management and Budget's concurrence.

* The FTA's $878 million share of BART's entire $2.9 billion Phase I Extensions Program is only **30 percent** of the total. When the entire Bay Area Rail Extension program is considered, FTA provides only **28 percent** of a $3.5 billion overall program.

* Surcharges collected at BART's Daly City Station would be set aside in a capital reserve account to cover unexpected cost growth beyond the project's $1.167 billion budget (and its various contingencies). If additional funds are needed for this capital reserve account a premium surcharge could be imposed for trips to the proposed International Terminal BART station.

See comment 5.

V. Regional Support for Project

The GAO's characterization of the proposed project as being "controversial" needs to be reexamined. All the relevant state and local agencies which have jurisdiction over the proposed BART Airport Extension are strongly in support of the project. Most recently, the Governor and members of the State Legislature of California have gone on record that the Airport Extension is one of their top three State priorities for FY 1997 federal transportation appropriations. Unanimous support is also well documented from the Bay Area's bi-partisan Congressional Delegation, the California Transportation Commission, Metropolitan Transportation Commission, City and County of San Francisco, Cities of Colma, South San Francisco, San Bruno, and Millbrae, the BART, SamTrans, and SFIA boards, and the Bay Area Council's 150-member Friends of BART Coalition.

Also, while the draft GAO report seems to acknowledge the congestion caused by the SFIA's expansion, it does not explicitly address or quantify the BART Extension's impact on this congestion. BART assumes that since the benefits of the Airport Extension are not mentioned in the draft report, the GAO must not dispute them.

See comment 6.

Conclusion

BART believes that the draft GAO report in large part accurately represents the facts associated with the proposed Airport Extension project. BART, however, does not concur with the opinions reached in the report's introductory summary and its conclusion. In particular, the GAO's skepticism about the merits of Design/Build construction, and BART's approach to it, indicates that there is a significant misunderstanding between BART and the GAO. Particularly troubling is the GAO characterization of this contracting procedure as being "unproven." This conclusion and the GAO's additional statements that the project's timetable is "very ambitious" and its Finance Plan has "little room for error" are addressed in detail by the information documented above.

BART is, in fact, making significant progress towards receiving environmental clearance from all the relevant state and federal agencies. Furthermore, the project's Finance Plan is based on proven contracting procedures, cost estimates which have been verified by industry experts, and revenue estimates which were developed by FTA and OMB staff. Lastly, a capital reserve account would be created to cover unexpected cost growth.

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Thank you again for the opportunity to provide written comments on this draft report.

Sincerely,

Richard A. White
General Manager

cc: Gordon J. Linton, FTA Administrator
Leslie T. Rogers, FTA Region IX
Lawrence D. Dahms, MTC
Gerald T. Haugh, SamTrans
John L. Martin, SFIA

Attachment I: Coordination with SFIA Master Plan

A. **Construction Schedule:** The schedule for the SFIA Master Plan construction determines the "window of opportunity" for the construction of the proposed BART Extension onto Airport property. SFIA has established a timeline for the BART Extension elements that requires their construction commence in the Fall of 1996. Construction of major SFIA Master Plan projects got under way in late 1995, based on Airport agreements with both the FAA and the Lease-Use Agreement with the air carriers presently utilizing SFIA. In order to initiate construction to meet this deadline, BART needs a Record of Decision (ROD) by late-summer. The Airport does not intend to proceed with major construction of BART elements without a Record of Decision for the BART project.

If this window of opportunity is missed, then it will be virtually impossible to build the BART elements as presently designed because critical structural components are fully integrated with the Airport Rail Transit System (ARTS). The SFIA will not consider delaying the construction of the International Terminal as it is the centerpiece of the Master Plan Improvement Program, and is already well underway. Therefore, if the BART elements' construction were to occur later, then portions of the International Terminal would have to be removed and reconstructed.

B. **Funding Support:** The airport has committed up to $200 million for on-airport construction of BART. Under the terms of its agreements with the airlines, SFIA may not proceed with any such capital improvements for a period not to exceed six months where the improvement has been objected to by a majority-in-interest of the airlines. After this period the SFIA may, however, proceed notwithstanding any objection by a majority-in-interest of the airlines. On March 6, 1996 the SFIA requested airline majority-in-interest approval for the expenditure of up to $200 million for the development of the on-Airport portion of the proposed BART extension to the Airport. If the airlines object to that expenditure, SFIA could not proceed with the $200 million expenditure until after early September 1996.

If the airlines do not object, SFIA could proceed sooner. In any instance, the SFIA Commission is free, and intends, to proceed with an inside-the-airport BART connection regardless of whether or not the airlines object to the expenditure. BART believes these SFIA actions are consistent with all appropriate FAA guidelines and with existing agreements between SFIA and the airlines.

C. **Funding Restrictions**: Lastly, the limitations on the use of the Airport's $200 million financial participation cited in San Francisco Mayor Willie Brown's March 27, 1996 letter to BART pose no problem to the project's financing plan. BART and the Airport are in agreement that the entire amount available from the SFIA can be effectively used within the confines established in this letter, i.e., the funds must be expended on project scope items which are not west of the Bayshore Freeway.

Attachment II: Environmental Process

Key GAO statement is listed first, followed by BART response.

Before FTA can approve the project, BART must resolve concerns expressed about draft EIS and complete the final EIS; obtain endangered species permits from USFWS; and obtain wetland permits from the Corps.

- The Section 7 Non-Jeopardy Opinion regarding endangered species was received from the USFWS on 5/20/96.
- Corps has issued its preliminary agreement that its concurs with the mitigation BART proposed in 404 permit application; Corps has stated that it will issue 404 permit after EIR is certified and Regional Water Quality Control Board (RWQCB) issues Section 401 Water Quality Certification.
- FTA has provided comments on the FEIS and is scheduled to provide final signoffs by May 31, 1996, whereupon the FEIS will go into print.

Attachment III: Cost Estimating

The GAO's skepticism about the merits of the Design/Build construction contracting method indicates that there is a significant misunderstanding between the GAO and BART on this issue. Particularly troublesome is the GAO's characterization of this procedure as being "unproven."

A. **The Track Record for Design/Build:** The Design/Build contracting method has been used extensively in the public and private construction industry as a method for improving project delivery. This success lead to Congress's authorization of the FTA Turnkey Demonstration Program, and the BART project's participation in this program. The GAO's report ignores these positive developments and instead focuses on two Design/Build rail projects which failed as a result of factors which were independent of the Design/Build contracting method: the Honolulu project experienced problems in its ability to finance the local funding share and for the Houston project changes in local political leadership and a lack of support for the selected technology were at the core of this project's demise.

B. **Engineering Design Approach:** The BART construction procurement would be based on a "controlled" Design/Build method. Certain defined project elements would be advanced by BART to 100% engineering design, such as geotechnical engineering, right-of-way engineering, and seismic engineering and design criteria/standards. The remaining components would be designed to an engineering level of not less than 50-60% completion. The Design/Build contractors, whose teams would include design professionals, would be pre-qualified to complete the remaining engineering work.

C. **Administrative Cost Savings:** The 15-20% cost savings projected by BART to result from the Design-Build method is based on the direct savings generated from administering fewer prime contracts as compared to conventional construction procurement methods. For example, the ongoing $1.2 billion BART Extension Program is being administered via 64 major prime contracts, including 49 construction prime contracts, 10 final design prime contracts, 3 construction management contracts, 1 community relations contract, and 1 General Engineering Consultant contract. For almost the same project cost, only nine contracts are proposed for the Airport Extension.

D. **Industry Review**: The Design/Build method for implementing the BART-SFO Extension has received extensive scrutiny from industry experts and FTA staff. A Blue Ribbon panel of experts in the Turnkey/Design/Build method, drawn from the procurement, legal, contracting, construction, and transit fields, was assembled by the FTA to review and comment on BART's approach. This panel found that BART's Design/Build method is consistent with the current best practices identified by the FTA and favored by the construction industry.

   In addition, the FTA Project Management Oversight Consultant (PMOC) assigned to BART has determined that the project's construction cost estimates are based on a proper application of sound cost principles and that overall cost estimates are generally reasonably and realistic. (This determination is documented in the PMOC Spot Report No. 13, as transmitted to BART in a letter from FTA Regional Administrator Leslie Rogers on May 16, 1996.)

E. **Contingency:** Given that some project components are at a lower level of design completion, a contingency of 18.5 percent (totalling $107 million) has been included in each Design/Build contract's cost estimate. This design or "estimating" contingency addresses scope modifications that may occur as design progresses from the conceptual level to the final level. Despite the GAO report's suggestion, this contingency and the $80 million overall project contingency are **not** included in the project budget as a result of a lack of confidence in the Design/Build method's ability to generate cost savings. The contingencies are budgeted to address unforeseen conditions.

Attachment IV: Financing Plan

A. BART has accepted FTA's position that the full funding grant agreement (FFGA) will not include any provisions which would allow for the FTA share of the project to increase beyond the $750 million figure cited in the GAO's draft report.

B. The estimates of annual appropriations to the project included in the FFGA Finance Plan are based on figures which were provided to BART by FTA headquarter's staff with the concurrence of the Office of Management and Budget.

C. Section 3(a)(8)(C)(ii) of the Federal Transit Act of 1992 defines the BART-San Francisco Airport Extension to be one element of a larger Bay Area program of interrelated projects. When the region's local financial commitment is considered in this context, one finds that the FTA would be providing **30 percent** of the funds for BART's $2.9 billion share of this program while state and local sources would account for the remaining 70 percent (Attachment IVa). This 30/70 ratio of FTA to state and local funds also applies to the larger regional program which not only includes the $2.9 billion BART program, but also the Santa Clara County Tasman Corridor project and the CalTrain Downtown Extension.

   Of the three BART Extension projects which will all be open by the end of this calendar year, the FTA has provided $128 million in federal funds (**10 percent**) of the $1.22 billion combined cost. These projects include the Colma Station Extension, Pittsburg/Antioch Extension and Dublin/Pleasanton Extension.

D. In approving its 1996 State Transportation Improvement Program (STIP), the California Transportation Commission reaffirmed its commitment to provide $108 million from various funding sources to the San Francisco Airport Extension. This STIP also included the approval of $40 million in FY 98, FY 99, and FY 2000 funding increments. Of the total $108 million commitment, $31 million remains to be programmed in future annual TCI funding cycles.

E. BART's Comprehensive Agreement with the San Mateo County Transit District (SamTrans) establishes a procedure for addressing unexpected cost growth on the Airport Extension. This procedure involves the creation of a reserve which is funded from a variety of sources, primarily a surcharge currently in place at BART's Daly City station. This surcharge generates $2 million a year and could be bonded against to meet cashflow needs.

   In addition to the funding sources identified in the BART-SamTrans Agreement for unexpected cost growth, BART is also prepared to impose a premium fare surcharge at the proposed SFIA Terminal station. Should unexpected cost growth require the imposition of this surcharge, an additional $3 million to $4 million a year could be generated.

Attachment V: Regional Support for Project

A. The GAO draft report's characterization of the project as being "controversial" needs to be reconsidered. The notion that project "controversy" resulted in the two redesigns of the project since 1992 is not accurate. The decision to move away from the 1992 locally preferred alternative's external alignment was motivated by a positive and not a negative development. That positive development was the willingness of the San Francisco International Airport to consider building and funding an on-airport BART station in conjunction with its Master Plan Improvement Program. The redesign of the April 1995 on-airport subway alternative as an aerial approach was also a positive development as it was motivated by a desire from the MTC and the US Congress to consider less expensive options for reaching the SFIA terminal.

B. The end result of these two redesigns is that the BART/Samtrans locally preferred alternative enjoys substantial support from all of the state and local agencies which have jurisdiction over the proposed project. The Governor and members of the State Legislature of California have recently gone on record that the Airport Extension is one of their top three State priorities for FY 1997 federal transportation appropriations. In addition, strong letters of support have been signed by the Bay Area's bi-partisan Congressional Delegation, the Chairman of the California Transportation Commission, the Chairman of the Metropolitan Transportation Commission, the Mayor of the City and County of San Francisco, and the Mayors of Daly City, Colma, South San Francisco, San Bruno, and Millbrae.

   The public at-large has also demonstrated its strong support for the project. This support is manifested in two San Mateo County votes in favor of extending BART further into the county and the June 1994 ballot measure in San Francisco where 67% of the voters directed officials to take all actions necessary to extend BART service into the San Francisco Airport terminal area. In addition, a 1994 survey of 1,001 registered voters in the Bay Area found that 89 percent wanted BART to serve the SFO Airport.

   The project has received the endorsement of the editorial boards of the Alameda Newspaper Group, San Francisco Chronicle, San Francisco Examiner, Contra Costa Times, and San Mateo Newspaper Group. The project has also recently received a major statement of support from the 150 Bay Area businesses and civic leaders (see Attachment Va). This widespread public support compares favorably against the more narrowly-focused opposition to particular project elements.

C. The GAO report states that the study of a supplemental commuter rail link to the Airport is being considered in conjunction with the SFO Extension project. As documented in a September 25, 1995 letter from Gerald T. Haugh to Congressman Frank R. Wolf (Attachment Vb), this study is separate from the BART San Francisco Airport Extension project and deals with a different transit ridership market.

The following are GAO's comments on BART's letter dated May 23, 1996.

GAO's Comments

1. In regard to coordinating with the airport, previous documents by BART and statements of FAA and San Francisco airport officials contradict BART's current concern that it will miss a "window of opportunity" should construction not move forward immediately. First, BART's September 1995 draft EIS found that the BART project's impact on the construction schedule of the airport would be nominal. The report noted that BART and the airport would have to coordinate minor changes and minimal modifications to align their respective projects. Second, the airport director stated to us that changes in BART's construction schedule would not adversely affect the airport's expansion plans: No major design changes would be needed to accommodate the BART project. FAA officials stated that the BART project is an add-on to the airport's construction plans. Therefore, the airport can complete its construction without the BART extension's being complete.

More importantly, BART needs to secure a financial commitment from the airport. BART's additional information provided in its response does not lessen the concerns we raised about the airport's contribution to the project. First, the Airport Commission has not provided FTA or BART with a written agreement committing to its portion of the project's cost nor has it determined the source of funds it will use to pay for that portion of the BART project located on the airport's property. Second, FAA has not reviewed or approved the source of funds the airport can use for the BART project. Until these issues are resolved, the project does not have a firm commitment to cover nearly one-fifth of the project's $1.167 billion cost.

2. Where appropriate, we have updated the draft report to include the more current information that BART presented. In particular, we have updated the report to indicate that the U.S. Fish and Wildlife Service issued a no jeopardy opinion on May 20, 1996, regarding the project's impacts to endangered species. We also updated the report to show that FTA expects to approve the final EIS in early June. At that time, the final EIS is subject to a 30-day comment period and subsequently will result in FTA's issuing a record of decision for the project by mid-August.

3. In regard to cost savings from using design-build procedures, we agree that this method has been used successfully in improving public and private sector construction projects. However, as FTA's consultants on design-build procedures noted in their 1994 report, the experience with these procedures for transit projects is common outside of North America,

and these experiences may not be directly transferable to the U.S. environment. For example, transit agencies in foreign countries have greater control over land use than their U.S. counterparts, thus facilitating public-private partnerships for the development of fixed guideway (transit) systems. In addition, the combination of design and construction disciplines within a single private entity tends to be a fairly prevalent practice in many countries but relatively new in the United States. FTA's consultants also noted that much of the experience gained by design-build projects outside the transit industry may not be directly transferable to that industry because of differences in industries' structures and the types of technologies used. As a result of the limited experience with design-build procedures in an American contracting environment, FTA selected the BART project to demonstrate any benefits from using these innovative contracting procedures to reduce a project's schedule and cost. Accordingly, we affirm our concerns with BART's projection of 15- to 20-percent savings from employing design-build contracting procedures.

In regard to the project management oversight consultant's (PMOC) report, the PMOC did not assess the certainty of BART's estimated 15- to 20-percent cost savings attributable to design-build procedures. However, the PMOC expressed concern that BART's estimates did not take into account 2 years of inflation, thereby underestimating the project's total cost by as much as $40 million. We have updated the body of our report to incorporate the PMOC's concerns.

We have revised the report in response to BART's explanation of why it included 18.5 percent in the design-build contracts to cover contingencies. However, it should be noted that BART's portrayal of the combined amounts for contingencies as 43 percent of the construction costs is misleading. Cost growth in nonconstruction areas, such as vehicle acquisition and financing, must also be funded by these contingency funds. The total amount for contingencies represents about 16 percent of the project's total cost.

4. We changed the report to state that FTA intends to cap the federal contribution at $750 million for the BART project; BART would bear any and all expenses beyond those identified in the grant agreement as necessary to complete the project. However, FTA does not expect to conclude a grant agreement with BART until October 1996; the final federal contribution that would be included in the grant agreement is still subject to negotiation between FTA and BART.

In regard to surcharges, while we recognize that BART proposes to use surcharges to cover unexpected cost growth, the ability of these surcharges for this purpose is limited. The Daly City station surcharge is projected to provide BART with $2 million each year to cover unexpected cost growth. This represents two-tenths of 1 percent of the project's total cost. The proposed premium surcharge at the airport would generate $3 million to $4 million each year, or three-tenths of 1 percent of the project's total cost. Furthermore, the airport surcharge would not be available until the airport station is open—currently projected for October 2000. In addition, none of these surcharges can be applied until the state legislature passes an amendment to BART's legislation.

5. We recognize that the project has strong support, including support from the governor and state legislature. However, during the course of our review, we also discovered opposition to the project from numerous groups, including local transit advocates, environmental groups, the Air Transport Association, and area businesses. In addition, two of BART's board members expressed concern to us about the cost-effectiveness of the project. We also observed at a public hearing on the BART project that many transit users and advocates in San Mateo county were concerned about the impact of this project on their current transit system, particularly the impact on Caltrain. Many of these opponents also testified before the House Appropriations Committee, which highlights the controversial nature of the project.

6. We have modified our draft report to include the new information on environmental approvals. While BART has made progress in gaining environmental approvals, we continue to consider the project's timetable ambitious. In addition, we cannot reconcile BART's concern over our conclusion with its previous statement that the "window of opportunity" will close without FTA's speedy approval.

Furthermore, BART's comments do not address a major obstacle for the financing plan, namely a change in California law needed to finance anticipated cash-flow shortfalls. We continue to believe that there is little room for financial error. As noted earlier, the surcharges BART cites to create a capital account for funding shortages would produce annual revenues equaling less than 1 percent of the project's current cost.

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