# FEDERAL RAILROAD ADMINISTRATION RECORD OF DECISION FOR THE TRANSBAY TRANSIT CENTER TRAINBOX

#### DECISION

The United States Department of Transportation, Federal Railroad Administration (FRA) has determined that the requirements of the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq., have been satisfied for the train box at the Transbay Transit Center ("TTC" or "Transit Center") in San Francisco, California.

This decision has been made in accordance with the provisions of NEPA, which requires Federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions, reasonable alternatives to those actions, and integrating public participation into the process. This document sets forth the Record of Decision of FRA for the granting of Federal funds for the train box at the TTC. In making this decision, FRA considered the entire record, including the information, analysis, and public comments contained in the portions of the Final Environmental Impact Statement/Environmental Impact Report<sup>1</sup> ("2004 EIS") for the Transbay Terminal/Caltrain Downtown/Extension Redevelopment Project ("Transbay Program") that cover Phase 1 of the Transbay Program, which was completed by the Federal Transit Administration ("FTA"). In addition, FRA prepared and has relied upon the May 28, 2010 Transbay Program Final EIS Reevaluation ("Environmental Reevaluation") of the Phase 1 portions of the 2004 EIS. Through the analysis contained in both the 2004 EIS and the Environmental Reevaluation, FRA has taken the requisite "hard look" at potential environmental impacts and has identified and independently evaluated the potential environmental effects associated with the project's alternatives.

This ROD has been drafted in accordance with NEPA, the Council on Environmental Quality (CEQ) Regulations implementing NEPA (most specifically 40 C.F.R. § 1505.2), and FRA's Procedures for Considering Environmental Impacts, 64 Fed. Reg. 28545 (May 26, 1999).

#### **INTRODUCTION**

FRA's proposed action is to provide up to \$400 million of funding under the American Recovery and Reinvestment Act of 2009 ("Recovery Act") to the Transbay Joint Powers Authority ("TJPA") to fund construction of a train box to accommodate future high-speed train ("HST") service at the TTC, which is an element of Phase 1 of the Transbay Program.

FTA and TJPA prepared the 2004 EIS as a joint environmental impact statement/environmental impact report to satisfy both the requirements of NEPA and the California Environmental

<sup>&</sup>lt;sup>1</sup> An Environmental Impact Report (EIR) is an environmental document required under the California Environmental Quality Act (CEQA).

Quality Act.<sup>2</sup> The 2004 EIS included an analysis of the environmental impacts of the Transbay Program, which includes the Caltrain Downtown Extension, the establishment of a redevelopment area plan, and the construction of the TTC on the site of the existing Transbay Terminal at First and Mission Streets in San Francisco, California. The purpose of the Transbay Program is to improve public access to bus and rail services, modernize the Transbay Terminal and improve service, reduce non-transit vehicle usage, alleviate blight, and revitalize the Transbay Terminal area. The TTC will replace the existing Transbay Terminal, which was first built in 1939, because the existing Terminal does not currently meet seismic safety or space utilization standards. Included in the above mentioned benefits, the 2004 EIS contemplated a train box at the TTC designed to accommodate future Caltrain and high-speed rail service.

The Transbay Program is divided into two construction phases. Phase 1 consists of the abovegrade portion of the TTC and below-grade excavation and structural support work including the train box. Phase 2 includes the construction of the Caltrain Downtown Extension ("DTX"), the rail tunnel that will also accommodate high-speed trains.

The Phase 1 train box will be constructed of reinforced concrete and consist of two levels. The lower level is planned to have six tracks and three platforms with two of the tracks serving Caltrain and the remaining four for use by high-speed trains. The upper level, referred to as the lower concourse, will serve as a rail passenger ticketing and waiting area; both levels will be connected to the building by stairs, elevators, and escalators.

The 2004 EIS also describes train tracks extending to the east side of Beale Street into a tail track structure; the tail track structure is not part of Phase 1. Where the alignment narrows at the west end of the train box to connect to the rail tunnel, the train box will accommodate the utility, signal, and control systems required for HST and Caltrain. This narrowing of the alignment at the west end of the train box is designated the throat structure; the throat structure is not part of Phase 1.

The Recovery Act provided \$8 billion to FRA as initial funding for the High-Speed Intercity Passenger Rail ("HSIPR") Program. The Secretary of Transportation selected California to receive up to \$2.25 billion of ARRA funds to assist in the development of high-speed intercity passenger rail service in California. FRA intends to provide up to \$400 million of California's Recovery Act funding directly to TJPA in order to construct the train box, which is designed to accommodate the future high-speed rail service at the TTC. Constructing the train box now results in substantial savings over options involving later construction of high-speed rail facilities under an already completed TTC.

# BACKGROUND

FRA has adopted the portions of the 2004 EIS that cover Phase 1 of the Transbay Program to satisfy FRA's obligations under NEPA to support its decision to provide Federal grant funds for the TTC train box. As part of the EIS adoption process, FRA prepared the Environmental Reevaluation of the Phase 1 portions of the 2004 EIS to consider recent modifications to the train box design and to update environmental information contained in the 2004 EIS pursuant to

<sup>&</sup>lt;sup>2</sup> On the basis of the 2004 EIS, FTA issued a Record of Decision on February 8, 2005.

FRA's Procedures for Considering Environmental Impacts, which require the reevaluation of a Final EIS if major steps toward implementation of the proposed action have not commenced within three or five years from the date of approval of the final EIS. The Environmental Reevaluation updates the description of the train box, including the method and staging of construction; summarizes five addenda to the 2004 EIS that were prepared by TJPA and which evaluated modifications to and refinements of the Transbay Program; and updates California HST ridership projections based on the most recent projections from the California High-Speed Rail Authority ("CHSRA") in its report to the California Legislature in December 2009. The Environmental Reevaluation also reevaluates certain elements of the environmental analyses in the 2004 EIS that are pertinent to providing HST service at the TTC; specifically, air quality, including greenhouse gases; transportation, including vehicles, transit, parking, and pedestrians; noise and vibration; construction impacts, including solid waste generated by construction; and the cumulative impacts of HST service.

FRA adopted the Phase 1 elements of the 2004 EIS related to the train box pursuant to the regulations promulgated by the CEQ. 40 C.F.R. 1506.3. The CEQ Regulations allow Federal agencies, such as FRA, to adopt environmental documents, or portions thereof, prepared by another Federal agency when the proposed actions are "substantially the same," and the adopting agency has concluded that the initial document meets the CEQ's requirements for an EIS. Id. Furthermore, the CEQ Regulations state that when the actions are substantially the same, "the agency adopting the agency's statement is not required to recirculate it except as a final statement." Id.

FRA conducted an independent review of the 2004 EIS for the purpose of determining whether FRA could adopt it pursuant to 40 C.F.R. 1506.3. Based on this review, FRA concluded that its action in funding the train box is substantially the same as the action documented in the 2004 EIS, that the 2004 EIS adequately assessed the environmental impacts associated with the train box and meets the standards of the CEQ NEPA Regulations (40 C.F.R. Parts 1500-1508), and therefore FRA could adopt the 2004 EIS. The CEQ Regulations strongly encourage agencies to reduce paperwork and duplication, 40 C.F.R. 1500.4, and one of the methods identified by CEQ to accomplish this goal is the adoption of environmental documents prepared by other agencies in appropriate circumstances. 40 C.F.R. 1500.4(n), 1500.5(h), and 1506.3. In addition, both Congress and CEQ guidance accompanying ARRA direct Federal agencies to utilize the most expeditious means available to satisfy NEPA, and specifically references the possible adoption of other agencies' EIS documents. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 1609(b) (stating that environmental reviews should be completed "on an expeditious basis" and that "the shortest existing applicable process under the National Environmental Policy Act shall be utilized"); CEQ Memorandum, Exec. Office of the President, Environmental Compliance and Guidance for Reporting NEPA Status and Progress for Recovery Act Activities and Projects, at 2 (April 3, 2009).

FRA published a notice of adoption and recirculation of the 2004 EIS and notice of availability of the environmental reevaluation in the Federal Register on June 4, 2010. 75 Fed. Reg. 31834-31835 (June 4, 2010). FRA adopted the Phase 1 portions of the 2004 EIS as they directly relate to FRA's funding of the train box under the Recovery Act and the HSIPR Program.

#### ALTERNATIVES CONSIDERED

The 2004 EIS considered the No Federal Action Alternative (NEPA No Build Alternative) and the Build Alternative (the Locally Preferred Alternative or Project). The Transbay Program was divided into three components for purposes of analysis in the EIS. As noted below, the EIS included analysis of several design options for each of the Program components of the Build Alternative, several of which were based on public concerns raised during circulation of the Draft EIS. The TTC train box covered by this ROD is one component of the Locally Preferred Alternative or the "Preferred Alternative" in the Final EIS.

#### No Build Alternative

The No Build Alternative consisted of existing Caltrain service with funded improvements and other committed bus, rail, and roadway improvements. It included proposed development in San Francisco in the 2020 horizon year. Under this alternative, the San Francisco Redevelopment Agency would not implement a Redevelopment Plan for the Transbay Area, state-owned properties in the Transbay Terminal would not be transferred to TJPA, and the existing Transbay Terminal would not be improved significantly beyond basic maintenance and required safety and accessibility improvements.

The No Build Alternative was rejected because, among other reasons, it failed to accommodate Year 2020 transit demand in the Transbay Corridor; failed to extend Caltrain to downtown San Francisco, thus increasing traffic congestion, travel times, and air pollution in the Peninsula Corridor; failed to provide the option of having a proposed high-speed rail terminal in downtown San Francisco; failed to adhere to San Francisco voter mandates (particularly the 1999 Proposition H which called for extending Caltrain to the Transbay Terminal); failed to create a transit oriented development in the Transbay Terminal Area; and failed to support construction of new housing.

# **Build Alternative**

The Build Alternative included all the elements in the No Build Alternative listed above plus the three main components of the Transbay Program: construction of the new multimodal Transbay Terminal with a train box to accommodate Caltrain and high-speed trains; transit oriented redevelopment of the Transbay Terminal Area; and an underground rail line extension (referred to as the DTX) of Caltrain to the Transbay Terminal. Each of these three components included specific design alternatives, as follows: (1) the new Transbay Terminal component included a West Ramp Alternative and a Loop Ramp Alternative; (2) Redevelopment of the Project Area included a Reduced Scope Alternative and a Full Build Alternative; and (3) the DTX component included a Second-to-Main Alternative and a Second-to-Mission Alternative, and a cut-and-cover option and a tunneling option.

# PREFERRED ALTERNATIVE

The approved Locally Preferred Alternative ("LPA") consists of the West Ramp Transbay Terminal, which includes the train box, the Full Build Redevelopment, and the tunneling option for the DTX with the Second-to-Main alignment. The 2004 EIS fully describes the environmental impacts of the LPA and incorporates measures to mitigate those impacts into the Project. The LPA represents the combination of components and features that most closely meets the Project's purpose and need, as discussed below and set forth in Chapter 1 of the 2004 EIS. The 2004 EIS found that the Project satisfies the Project's purpose and need and makes a substantial contribution to improving the Bay Area's transportation and air quality.

The proposed action covered by this Record of Decision is FRA's funding, under the Recovery Act, of the Transit Center train box of Phase 1 of the TTC, which is part of the Terminal component of the LPA. The Transit Center will replace the existing 1939 Transbay Terminal, located at First and Mission streets in downtown San Francisco, with a modern multi-modal transit hub, which may potentially serve as the San Francisco terminus for HST service between Los Angeles and San Francisco; Caltrain commuter train service from the Peninsula to San Francisco; regional public and private bus networks<sup>3</sup>; and the connection point between HST and San Francisco Municipal Railway light rail (San Francisco Muni), Bay Area Rapid Transit (BART), and bus service including Amtrak Thruway Bus Services.

#### Purpose and Need

Construction of the Phase 1 train box, which will facilitate Caltrain service and potential statewide HST service in downtown San Francisco, including potentially 48,200 daily HST boardings and alightings by 2035 and associated reduction in vehicle miles traveled, will assist in addressing the following purposes and needs set forth in Chapter 1 of the 2004 EIS:

- Provide a multi-modal transit facility that meets future transit needs;
- Improve the Terminal as a place for passengers and the public to use and enjoy;
- Improve Caltrain service by providing direct access to downtown San Francisco;
- Enhance connectivity between Caltrain and other major transit systems including: BART, Muni, AC Transit, Golden Gate Transit, WestCAT, SamTrans, Amtrak bus, and Greyhound;
- Enable direct access to downtown San Francisco for future intercity and/or highspeed rail service;
- Accommodate projected growth in travel demand in the San Jose-San Francisco corridor;
- Accommodate the need for additional AC Transit bus service;
- Reduce traffic congestion on US Highway 101 and 1-280 between San Jose and San Francisco, the Bay Bridge, and other routes;
- Reduce vehicle hours of delay on major freeways in the Peninsula corridor;

<sup>&</sup>lt;sup>3</sup> The bus networks that will be served are Alameda-Contra Costa Transit (AC Transit), San Francisco Municipal Railway, SamTrans, Golden Gate Transit, Greyhound, WestCAT Lynx, and Amtrak Thruway.

- Improve regional air quality by reducing auto emissions; and,
- Enhance accessibility to employment, retail, and entertainment opportunities.

### ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION

The Environmental Reevaluation updated those sections of the Phase 1 portions of the 2004 EIS for which new information is available that is pertinent to the proposed action. The following summary reflects the 2004 EIS as updated by the Environmental Reevaluation and focuses on the impact assessment categories that are relevant to FRA's action in funding a portion of the cost of the train box.

# Air Quality

**Construction Impacts.** Construction of the Transit Center, including the train box, could result in short term emissions of air pollutants. The 2004 EIS used the Bay Area Air Quality Management District's ("BAAQMD") approach to the analysis of construction impacts, which involves implementation of effective and comprehensive control measures rather than detailed quantification of emissions. These measures are incorporated into Mitigation Measures AC 01 through AC 15 (Mitigation Monitoring Plan ["MMP"], Appendix A, pp. 20-21).

**Air Quality Conformity.** Since the 2004 EIS was completed, several Federal and California ambient air quality standards have changed, as explained in the Environmental Reevaluation. Since the 2004 EIS was completed, there also have been several attainment designation changes in the Bay Area. Changes in the Federal and State attainment status for the Bay Area do not change the Program's impacts because the Transbay Program, including the Transit Center and the proposed HST system, would result in beneficial air quality impacts due to the reduction in vehicle miles traveled (VMT) and the number of airplane trips.

**Greenhouse Gases.** The 2004 EIS did not include the study and analysis of greenhouse gases (GHGs).<sup>4</sup> The Environmental Reevaluation quantifies CO<sub>2</sub>e emissions associated with the California HST system. Providing HST service, even taking into account the CO<sub>2</sub>e emissions resulting from construction of the HST system, would decrease GHGs compared to the No Build Alternative as a result of a decrease in VMT.

**Air Quality Impacts Associated With High-Speed Trains.** Based on the analysis in the 2008 Bay Area to Central Valley High-Speed Train Final Program EIR/EIS<sup>5</sup> (2008 Bay Area to Central Valley EIR/EIS), the Bay Area to Central Valley HST system would have a beneficial effect on air quality because it is predicted to result in reduced pollutant emissions compared to the No Build Alternative even assuming electrical energy use by the HST system and construction emissions. That is because these emissions would be more than offset by the beneficial reduction in automobile VMT (mobile sources) and in the number of airplane trips as

<sup>&</sup>lt;sup>4</sup> The principal GHGs are carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $N_2O$ ), ozone, and water vapor. Carbon dioxide is the "reference gas" for climate change, meaning that emissions of GHGs are typically reported in "carbon dioxide-equivalent" measures ( $CO_2e$ ).

<sup>&</sup>lt;sup>5</sup> CHSRA and U.S. Department of Transportation FRA, 2008.

a result of the HST system. For the same reasons, the proposed HST system also would result in beneficial impacts related to GHGs and global climate change.

A new Federal conformity rule regarding  $PM_{2.5}$  took effect on April 23, 2010. 40 C.F.R. 93.116. This rule is specific to Transportation Conformity and is intended to ensure that no violations of the  $PM_{2.5}$  standard would occur as a result of a project. The train box would not be a source of  $PM_{2.5}$  emissions and thus will not be inconsistent with the new rule. The CHSRA and FRA conducted a General Conformity analysis of the HST system, including the provision of HST service to the Transit Center, in the 2008 Bay Area to Central Valley EIR/EIS, and found that the project is consistent with General Conformity because the HST system would not result in an emissions increase greater than the General Conformity *de minimis* levels; rather, it would reduce emissions of criteria pollutants. Therefore, provision of HST service to the Transit Center would be consistent with General Conformity.

# **Transportation**

The Environmental Reevaluation contains a detailed evaluation of the projected HST system ridership to estimate the number of new vehicle, transit, pedestrian and other trips generated by potential HST service into the train box. The analysis assumes full 2035 projected ridership by the 2030 analysis year and rounded up the assumed number of HST passengers from 48,200 to 50,000, both of which are conservative assumptions for potential impact analyses.

**Transit Operations.** The construction of the train box and potential HST service at the Transit Center would not affect the design and configuration of the access and circulation plans for any transit operator that would serve the Transit Center or the operators' storage and operating costs (which are not physical impacts in any case). Therefore, there would be no change in the significance of transit operations impacts.

**Corridor Transit Patronage.** The construction of the train box and potential HST service at the Transit Center would bring more riders to the transit providers that directly serve the Transit Center and those that operate nearby, including AC Transit, BART to the East Bay, Golden Gate Transit, and San Francisco Muni. In general, all transit operators have the available capacity to accommodate additional riders within their current operating plans, or they have the ability to increase service levels accordingly (see also the later discussion with respect to AC Transit). Increases in transit ridership are not considered impacts on the physical environment when they can be accommodated without the need for construction of new physical infrastructure. Therefore, there would be no change in the significance of transit patronage impacts as a result of the potential HST service.

**Vehicular Traffic.** In general, the construction of the train box and potential HST service at the Transit Center may result in the further shifting of trips from private vehicles to the new HST service. Therefore, there would be increased beneficial effects on vehicular travel time and on VMT in the region. However, HST service into the train box would result in a cumulatively considerable contribution to an already unacceptable level of service at ten intersections. These intersections would operate at an unacceptable level of service (LOS F) in 2030 with or without the contribution from passengers of the HST service into the train box. In addition, HST train service into the train box would contribute to significant cumulative traffic impacts at five

intersections that were not identified in the 2004 EIS. However, previously identified significant traffic impacts at two intersections that were identified in the 2004 EIS would no longer occur under 2030 cumulative conditions. Under the 2030 cumulative analysis, four of the five newly affected intersections would operate at LOS E and LOS F conditions as a result of the projected increase in traffic in the study area and the roadway network modifications included in the proposed Transit Center District Plan without Transit Center-related traffic. While HST service into the train box will contribute to these significant cumulative impacts, the unacceptable future levels of service at these intersections would occur with or without the increase in traffic volumes generated by HST service into the train box as a result of projected future development in the area.

Although potential HST service would contribute to changes in the significance of traffic impacts, these changes and the adverse effects accompanying them would occur with or without the traffic generated by the potential HST service into the train box. In general, these changes are primarily due to the differences between the 2020 cumulative future traffic and roadway conditions analyzed in the 2004 EIS and the current analysis, which is based on updated, projected cumulative future conditions in 2030.

**Parking.** The construction of the train box and potential HST service at the Transit Center would not affect the provision or removal of any off-street parking facilities, nor would it affect the loss in spaces or parking demand associated with the redevelopment parcels. HST service into the train box would generate additional parking demand (estimated to be about 250 spaces), and no additional parking capacity would be provided. However, as identified in the 2004 EIS, parking shortfalls are considered to be social effects rather than impacts on the physical environment. Therefore, there would be no change in the significance of parking impacts.

**Non-motorized Traffic.** The 2004 EIS considered the effects of the Transbay Program on bicycle and pedestrian conditions in the area.

Bringing HST service into the train box would add to the forecasted overall increase in bicycle volumes because a portion of the potential HST riders (about 1% or approximately 480 riders per day) would travel to and from the Transit Center on bicycle. It is still anticipated that the bicycle lanes and routes around the Transit Center would accommodate these bicycle volumes, and that the planned number of bicycle storage spaces would be adequate. Therefore, there would be no change in the significance of bicycle impacts.

In general, a substantial increase in pedestrian volume is anticipated as a result of the increase in development proposed in the area. However, the roadway and sidewalk modifications proposed in the Transit Center District Plan would noticeably improve the pedestrian conditions, with wider sidewalks and corner bulbs that increase the amount of space for pedestrians and shorten the walk distances across intersections. Although potential HST service to the train box would result in additional pedestrian activity, this increased activity would not cause any study location to worsen to LOS F conditions, nor would it result in a significant contribution to cumulative traffic conditions at the locations that were projected to operate at LOS F, according to the applicable impact analysis methodology. Therefore, there would be no change in the significance of pedestrian impacts resulting from the possible introduction of HST service into the train box.

#### **Noise and Vibration**

The 2004 EIS concluded that there would be no air borne operational noise impacts resulting from train service to the Transit Center because the trains would enter the Transit Center through an underground tunnel. Potential HST service to the train box would not change this conclusion, because the HST service would be in a tunnel underground on the same tracks.

The 2004 EIS concluded that operation of the Transbay Program would have significant ground borne vibration impacts at four locations along the DTX. However, the impacts at these locations would be reduced to a less-than-significant level by Mitigation Measure VibO 1 identified in the 2004 EIS. (MMP, Appendix A, p. 4.) Although HST service would increase the total number of daily train movements (inbound and outbound), the number of movements would remain within the threshold category analyzed in the 2004 EIS (i.e., "frequent"), the per event level of noise and vibration would not increase, there would be no change in the location of the train box in relationship to sensitive receptors, and Mitigation Measure VibO 1 would effectively reduce HST vibration impacts to a less-than-significant level. While HST vehicle design characteristics, such as axle loads, suspension stiffness, and operating speed, have not yet been established, it is assumed that the HST vehicles would travel at the same speed entering the train box as the Caltrain vehicles (a maximum of 5 to 10 miles per hour), and that Mitigation Measure VibO 1 would be effective for HST vehicles.

#### **Construction**

Since 2004, minor changes have been made to construction details of the Transit Center during development of final design. As explained in the Environmental Reevaluation, FTA found that construction of the Transit Center in either one or two stages would not result in environmental impacts beyond those previously evaluated in the 2004 EIS. The 2004 EIS identified the potential use of tiebacks or struts for temporary excavations. Based on the current design, only struts would now be used, thereby eliminating the need to obtain access underneath other existing structures. The use of struts only for temporary excavation would not result in new or more severe impacts, but would reduce impacts identified in the 2004 EIS.

The analysis of solid waste management in 2004 EIS Section 5.4.2.3 is not changed by this FRA action. In addition, a new city enactment adopted since 2004 will have the effect of reducing the solid waste generated during construction and in the recycling of more construction and demolition debris and diversion from landfills than was anticipated in the 2004 EIS.

To facilitate the flow of traffic during construction and reduce traffic impacts on affected property owners and drivers, TJPA will develop traffic management plans prior to construction for areas affected by surface and cut-and-cover construction for the TTC. Mitigation Measure PC 7, which was adopted and incorporated into the Transbay Program and would apply to construction of the train box, would reduce the potential impacts of construction on traffic and transportation to a less-than-significant level (MMP, p. 20).

The 2004 EIS concluded that the short-term noise and vibration impacts of construction of the Transit Center would be significant. These impacts would be reduced to a less-than-significant level by measures identified in the 2004 EIS that were incorporated into Mitigation Measures

NoiC 1 through NoiC 6 and VibC 1 through VibC 6. (MMRP, pp. 2-5.) Constructing the train box and bringing HST service into the train box would not change these conclusions because no changes are proposed with regard to construction of the train box.

All other construction considerations related to the train box are substantially similar to those covered in the 2004 EIS. Thus, potential HST service into the train box would not result in any new significant construction impacts.

# Cumulative Impacts of the Train Box and the HST System

FRA considered the proposed action together with the cumulative impacts analysis in the 2008 Bay Area to Central Valley EIR/EIS, which analyzed the portion of the California HST system that includes the possibility of the San Francisco terminus at the Transit Center and is the most recently available information on the impacts of high-speed rail. The 2008 Bay Area to Central Valley EIR/EIS analyzed whether implementation of the Bay Area to Central Valley portion of the HST system, including a station at the Transbay Terminal, could result in significant cumulative impacts in combination with closely related past, present, and reasonably foreseeable future projects. The 2008 Bay Area to Central Valley EIR/EIS found that the HST system could have a cumulatively considerable impact on the following: traffic and circulation and travel conditions; land use compatibility; agricultural land; aesthetics and visual resources; cultural and paleontological resources; biological resources and wetlands; and public parks and recreation resources (Section 4(f) and 6(f) resources). HST service into the train box either would not contribute to these cumulative impacts or would not change the prior analysis in the 2004 EIS for the following reasons.

**Traffic and Circulation and Travel Conditions.** The Transbay Program would continue to have a significant and unavoidable cumulative impact on intersection levels of service. Future conditions and developments in 2030, with or without HST service to the train box, would contribute to cumulative impacts at some different intersections than those identified in the 2004 EIS. Potential HST service into the train box would not change these conclusions. The affected intersections would operate at unacceptable levels of service with or without the contribution of HST passengers as a result of the projected future development; however, the contribution of HST would be cumulatively considerable at some locations.

Land Use Compatibility. The 2004 EIS determined that the Transbay Program is compatible with local land use. It would not conflict with local land use plans and policies, divide an established community, result in significant job loss, or have significant environmental justice impacts. Potential community impacts resulting from property acquisition and construction would be mitigated to a less-than-significant level by Mitigation Measures Prop 1, PC 1 through PC 7, and GC 1 through GC 5 (MMP, Appendix A, pp. 1, 18-20). Potential HST service at the train box would not change any of these conclusions because the Program's land use and footprint remains the same.

**Agricultural Land.** The Transbay Program, including the Transit Center and train box, would have no impact on agricultural resources, because there are no agricultural resources in the Transbay Program area. Potential HST service at the train box would not change this conclusion.

**Aesthetics and Visual Resources.** The 2004 EIS found that Transit Center would not have any impacts on aesthetics and visual resources. Potential HST service at the Transit Center would not change this conclusion because it would have no effect on the above-ground design of the Transit Center. In addition, the 2004 EIS found that short-term visual changes as a result of construction activities would be less than significant, and these impacts were further reduced by Mitigation Measures VA 1 and VA 2 (MMP, Appendix A, p. 22).

**Cultural and Paleontological Resources.** The Transbay Program would have a significant impact on archeological resources, but that impact would be mitigated to a less-than-significant level by Mitigation Measures CH 1, CH 2, and CH 15 through CH 20 that require preparation of a comprehensive archaeological research design and treatment plan for archeological resources (MMP, Appendix A, pp. 7-11, 14). The Transbay Program would have a significant and unavoidable effect on historic resources and would thus contribute to this cumulative impact. Mitigation Measures CH 1 through CH 14 and CH 19 and CH 20 would not reduce this impact to a less-than-significant level. (MMP, Appendix A, pp. 7-11). Construction of the Transbay Program, including the train box, would continue to contribute to this significant cumulative impact. These impacts would not be increased or otherwise affected by potential HST service into the train box, however.

**Biological Resources and Wetlands.** The Transbay Program, including construction of the train box, would have no impact on biological resources because no sizable natural habitat for biological plant, animal, or bird species remains in the study area. The Program area is outside of the 100-foot Bay shoreline band, and the U.S. Fish and Wildlife Service has indicated that no adverse effects on endangered species of wildlife and plants are expected from the Transbay Program. Potential HST service at the train box would not change these conclusions.

**Public Parks and Recreation Resources (Section 4(f) and 6(f) Resources).** The Transbay Program, including construction of the train box, will use Section 4(f) resources through direct acquisition and temporary occupancy. This is because it requires demolition of the Transbay Terminal and loop ramp structures, which are contributing elements of the San Francisco–Oakland Bay Bridge, which is listed on the National Register of Historic Places (NRHP), and demolition of three buildings that contribute to a historic district eligible for the NRHP. The 2004 EIS and the FTA ROD found that there is no feasible and prudent alternative to the use of these Section 4(f) resources, and that the Transbay Program includes all possible planning to minimize harm resulting from such use. Construction of the Transbay Program, including the train box, would continue to contribute to this significant cumulative impact. These impacts would not be increased or otherwise affected by potential HST service into the Transit Center.

The construction of the train box would have no impact on Section 6(f) resources because there are no Section 6(f) resources in the Transbay Program area.

# COMMENTS AND COORDINATION

FRA published a notice of adoption and recirculation of the 2004 EIS and notice of availability of the Environmental Reevaluation in the Federal Register on June 4, 2010. EPA published a notice of availability of the 2004 EIS in the Federal Register on May 28, 2010, consistent with its usual practices (75 Fed. Reg. 30022-30023, May 28, 2010). The Environmental Reevaluation

was also made available on TJPA's web site (www.transbaycenter.org), on FRA's web site (http://www.fra.dot.gov), and at libraries in San Francisco, San Bruno, and Oakland, California. FRA mailed a notification of FRA's adoption and identified places where the 2004 EIS and the Environmental Reevaluation are available to owners and occupants of nearby and affected property, persons and parties of record who have participated in the most recent phase of the 2004 EIS process, as well as to elected officials, local transit agencies, regional agencies, local media, and potentially interested community organizations. FRA also mailed copies of the Environmental Reevaluation to government agencies and to affected property owners. FRA accepted comments on the 2004 EIS and the Environmental Reevaluation through June 28, 2010.

FRA received one comment letter from the Golden Gate Transit Bridge, Highway and Transportation District ("Golden Gate Transit"). FRA has reviewed and considered the comments in this letter. A summary of the comments and FRA's responses are set forth below.

#### **Comments and Response**

The Golden Gate Transit letter acknowledges that increased transit ridership related to the potential for HST service to the TTC projected in the Environmental Reevaluation is not strictly an environmental impact issue, but Golden Gate Transit is of the opinion that this represents a significant operational impact. This issue was analyzed in the Environmental Reevaluation. As discussed on page 20, the potential HST service to the TTC would result in increases in ridership to the transit providers who provide service within and to/from San Francisco. Overall, it was estimated that approximately 4 percent of the increased transit ridership would be on Golden Gate Transit buses and ferries, which would equate to approximately 1,000 new riders per day. These riders would be distributed between inbound and outbound trips and throughout the day. Based on the calculated hourly distribution of HST ridership (as presented in Appendix B to the Environmental Reevaluation), during the weekday PM peak hour, there was anticipated to be 34 new Golden Gate Transit riders into San Francisco and 18 new Golden Gate Transit riders from San Francisco due to HST service. Because these new riders would be dispersed among the Golden Gate Transit bus and ferry routes, they would not substantially affect overall Golden Gate Transit operations or conditions on any one route. As a result, the conclusions documented on page 20 of the Environmental Reevaluation adequately address the potential effects of the new Golden Gate Transit ridership as a result of bringing HST service into the Transit Center.

Golden Gate Transit also states that the Bus Plaza may not be able to accommodate future Golden Gate Transit passenger levels. The Bus Plaza occupies a ground level section of the TTC between Beale and Main Streets and provides boarding islands for Muni and Golden Gate Transit bus passengers. Design development for the TTC has been completed and preparation of construction contract documents, including drawings and specifications, has been initiated. As explained in a June 11, 2010 letter from TJPA to Golden Gate Transit, TJPA is moving forward with a Bus Plaza design that will accommodate Golden Gate Transit's current operational needs, and which can accommodate near-term incremental growth, including increased Golden Gate Transit ridership due to HST service to the TTC. TJPA has committed to working collaboratively with Golden Gate Transit and the San Francisco Municipal Transportation Agency to ensure the adequacy of the Bus Plaza facility well into the future. The last comment in the Golden Gate Transit letter involves the design of the bus storage facility. The bus storage facility, which would be located several blocks away from the TTC, between Perry/Stillman and Third/Fourth Streets, was analyzed in the 2004 EIS. The 2004 EIS contained conceptual sketches, which indicated a capacity of approximately 140 Golden Gate Transit buses at the bus storage facility. Preliminary engineering detailed refinements to the bus storage design and addressed specific design criteria such as minimum bus turning radii for Golden Gate Transit buses and the minimum clearance around structural columns of the Bay Bridge approach required by Caltrans. Subsequently, Golden Gate Transit came forward with operational requirements that precluded backing up of buses. Both of these refinements reduced the assumed capacity of the bus storage facility. In fall 2009, Golden Gate Transit assumed responsibility for the design and construction of its bus storage area, including conducting all necessary environmental review.

Accordingly, the issues related to the ultimate design of the off-site bus storage facility are independent of bringing HST into the TTC. As indicated, the TTC facilities provide sufficient capacity for Golden Gate Transit to meet any demands placed upon that system by HST ridership.

# ACTIONS TO MITIGATE ENVIRONMENTAL IMPACTS

Construction of the train box for Phase 1 of the Transbay Program is subject to compliance with the following specific 2004 EIS environmental mitigation measures that address impacts to which the proposed FRA action would contribute: Mitigation Measures AC 01 through AC 15, CH 1 through CH 20, GC 1 through GC 5, NoiC 1 through NoiC 6, PC 7, PC 1 through PC 7, Prop 1, VA 1 and VA 2, VibC 1 through VibC 6, and VibO 1. See MMP, Appendix A hereto. TJPA shall implement (or cause to be implemented) all mitigation measures provided in the 2004 EIS that are applicable to Phase 1 construction as it relates to FRA's funding of the train box. Implementation of these mitigation measures by TJPA during construction and operation of the train box will avoid, minimize, or mitigate to the extent practicable, the potential environmental impacts discovered during the course of the environmental review. As the 2004 EIS documents, all practicable means to avoid or minimize the environmental harm from the Project have been adopted.

In addition, FRA has become a signatory to the existing Memorandum of Agreement (MOA, Appendix B hereto) between FTA and the California State Historic Preservation Officer and will act as co-lead Federal agency with FTA for the Section 106 process to ensure, along with FTA, that TJPA implements the stipulations of the MOA for which FTA and FRA are responsible.

#### **DETERMINATIONS AND FINDINGS**

#### Section 4(f) Findings

The U.S. Department of Transportation statute known as "Section 4(f)" (49 U.S.C. 303) is applicable to FRA's provision of funds to TJPA. Section 4(f) resources include publicly owned parks, recreation areas, or wildlife or waterfowl refuges or any publicly or privately owned historic sites. Section 4(f) mandates that the Secretary of Transportation shall not approve any transportation project requiring the use of these resources unless there is no prudent and feasible alternative to using that land, and the project includes all possible planning to minimize the harm to the public park, recreation area, wildlife or waterfowl refuge, or significant site, resulting from that use.

FTA included a Final Section 4(f) evaluation and finding in its ROD. Because the construction of the train box is an integral part of the Transbay Program and necessarily requires the "use" of historical sites (including the existing Transbay Terminal), the previous Section 4(f) analysis is equally applicable to FRA's decision to provide funding for the train box.

With regard to the use of the Historic Transbay Terminal and associated ramps, FTA found that the historic Transbay Terminal and some associated historic elements must be demolished in order to construct the new Transit Center (including the train box). Two alternatives to this use of the historic Transbay Terminal were considered: (1) the rehabilitation of the existing terminal, and (2) locating a new multimodal terminal at an alternative site between Main and Beale.

1. <u>Rehabilitation</u>: To satisfy the project purpose and need, the rehabilitation alternative would have required retrofitting the existing terminal to accommodate the rail tracks and station platforms. Two options were considered: an underground alignment and an aerial alignment. The underground option would have required bringing the rail tracks into the basement of the present terminal. This was determined to be infeasible from an engineering perspective, since the underground rail terminal would not fit within the existing building foundation and support structure. The only feasible way of building an underground rail terminal that would meet the project's purpose and need would be to tear down the existing terminal.

The aerial option would have required construction of a new ramp for the rail tracks from a tunnel portal on Essex Street up to the Transbay Terminal's existing aerial ramp level. Due to the area's topography, this new ramp would impact vertical clearance for vehicles traveling on Howard Street and would have introduced visual impacts (the bridge over Howard Street would need to be very large to support the weight of trains). The existing aerial ramps would need to be rebuilt to meet the increased loading of commuter trains, but their radii could not be increased to allow a gentler transition into the Transbay Terminal building given the location of buildings surrounding the ramp footprint. The ramp's existing radii would not be acceptable for proposed high-speed rail operations and would create unacceptable noise impacts as commuter trains passed through the curve. The construction of larger aerial ramps would also impose new visual impacts into the area. Furthermore, this option would have displaced AC Transit and Greyhound operations from the terminal without providing an alternative location. The aerial option was determined to be infeasible from an engineering perspective since it would not be possible to

design a rail terminal that would accommodate proposed high-speed rail, and from an environmental perspective since it would create new traffic, noise, and visual impacts to the area.

Finally, it should be noted that many alternatives to demolishing the Transbay Terminal have been considered in many environmental and planning studies completed for the Transbay Project. All these studies found that, to meet the project purpose and need, it was impossible (within all bounds of practicality) to rehabilitate the existing Transbay Terminal building. The level of reconstruction needed would result in the almost complete rebuild of the existing building and would have resulted in a project that did not meet the project purpose (for example, it would not have had sufficient track capacity to meet future rail service demand). Furthermore, even without adding rail service to the Transbay Terminal, the building requires an extensive rehabilitation and seismic retrofitting to meet current standards and needs. The State of California determined that a number of basic deficiencies would need to be corrected if additional rehabilitation actions were to be undertaken for a terminal retrofit. Accordingly, FTA determined that it was infeasible from an engineering perspective to rehabilitate the existing Transbay Terminal and meet the Transbay Project's purpose and need.

2. <u>Main/Beale Alternative</u>: An alternative site at Main and Beale Streets did not meet the Transbay Project's purpose and need because the site was too small for a rail terminal that would accommodate the proposed commuter and proposed high-speed rail services; there was no feasible rail alignment to the site; and the site did not meet AC Transit's long-term transit needs.

The Main/Beale site is constrained on the north by Mission Street and on the South by the United States Postal Service building. This means that there is not enough space available to allow tracks to branch into station tracks with platforms long enough to serve all the trains that would use the station. Several of the tracks could only be approximately 700 feet long, far short of the proposed high-speed rail train design criteria.

It would also be infeasible to reach the Main/Beale site with an underground rail alignment. Two possible alignment options were considered in the 1997 Caltrain Downtown Extension Draft EIS/EIR study: a cut-and-cover option and a tunneling option. The cut-and-cover option would have required cut-and-cover construction of a relatively deep trench directly in front of the San Francisco Bay Bridge cable anchorage. After meetings with Caltrans (the bridge operators), it was determined that this option was infeasible given the construction difficulties and the danger of undermining the stability of the Bay Bridge. The cut-and-cover option would also have required excavation in the Embarcadero, thus impacting traffic, Muni's new light rail line, the Giants Stadium, and the new residential neighborhood. The tunneling option was also determined to be infeasible since geological investigations found that rock in this area was poor for tunneling, thus increasing the likelihood of cave-ins and surface subsidence. The tunneling option also would have required construction staging areas on property that has since been built-upon, and given the angle with which the tunnel would intersect Beale Street; it would have further reduced the effective area available for the terminal platforms.

Finally, the Main/Beale site did not meet AC Transit's long-term transit needs. A Bay Crossings Study estimated that travel in the Bay Bridge corridor will increase substantially by year 2025 and that as a result, Transbay bus ridership could triple. AC Transit determined that the

Main/Beale site is not large enough, and the site is not properly oriented to facilitate efficient bus operations.

In summary, the Main/Beale alternative was determined to be infeasible from an engineering standpoint, would not meet the project's purpose and need, and would impose unacceptable environmental impacts on the South Beach neighborhood.

For these reasons, FTA determined that there was no feasible and prudent alternative to the demolition of the Transbay Terminal building that would satisfy the Transbay Project's purpose and need.

#### Measures to Minimize Harm to the Transbay Terminal and Associated Historic Elements

The following actions will be taken by TJPA to mitigate harm:

1. <u>Permanent Interpretive Exhibit at the New Terminal</u>: TJPA will integrate into the design of the new terminal a permanent interpretive exhibit that shows the design of the historic terminal and associated historic elements and presents the historic relevance of the facility.

2. <u>Salvage</u>: TJPA, in consultation with Caltrans, will identify elements of the existing Transbay Terminal that are suitable for salvage for interpretive use in the aforementioned interpretive display, or in museums, and will salvage the identified elements prior to demolition.

3. <u>Oakland Museum of California Exhibit</u>: TJPA will consult with Caltrans and with the Oakland Museum, prior to demolition of the Transbay Terminal, about contributing photographs, drawings, salvaged artifacts, and other historically relevant materials relating to the Bay Bridge and Transbay Terminal and will provide such materials as are agreed upon.

4. <u>Documentation</u>: Prior to demolition, TJPA will consult with the State Historic Preservation Officer (SHPO) to ensure that the Transbay Terminal has been adequately documented to SHPO's satisfaction. TJPA will supplement the existing documentation as necessary to fully document the Terminal in accordance with HABSIHAER standards.

FTA found that the above measures constitute all possible planning to minimize the harm resulting from the demolition of the historic Transbay Terminal. In addition, by letter dated December 3, 2004, the Department of Interior (DOI) stated that "the concerns of DOI had been adequately addressed."

By adopting the 2004 EIS, FRA is also adopting FTA's Final Section 4(f) evaluation and finding that there is no prudent and feasible alternative to the use of the above described historical properties and that the project includes all possible planning to minimize the harm to those properties.

#### Section 106 of the National Historic Preservation Act

In June 2004, FTA, TJPA, the SHPO, the City and County of San Francisco, the Peninsula Corridor Joint Powers Board, and the San Francisco Redevelopment Agency entered into a Memorandum of Agreement (MOA) regarding the Transbay Project's effects on historic properties pursuant to the requirements of Section 106 of the National Historic Preservation Act. TJPA was originally a concurring party responsible for implementing the Section 106 responsibilities under the MOA but is now a signatory party to the MOA. In order to comply with its obligations under Section 106, FRA has become a signatory to the existing MOA. The MOA, and Amendment 1 that adds FRA and TJPA as signatories, is set forth in Appendix B.

#### **NEPA Finding**

FRA finds that the effects of implementation of the train box portion of Phase 1 of the Transbay Transit Center Program have been evaluated, an adequate opportunity had been afforded for the review and presentation of views by parties with an interest in the project, and that all reasonable steps have been taken to minimize and mitigate any environmental effects of the project.

#### CONCLUSION

After an extensive and independent review, FRA has adopted those portions of FTA's 2004 EIS dealing with Phase 1 of the Transbay Transit Center as it relates to FRA's proposal to provide Recovery Act funding to TJPA for a train box at the TTC and to enter into a funding agreement with TJPA.

FRA adopted those relevant portions of the 2004 EIS in reliance upon the CEQ Regulations authorizing an agency to adopt an EIS prepared by another agency when the agency activities involved are substantially the same and the adopting agency has concluded that the initial statement meets the standards for an adequate statement under the CEQ Regulations. As recited earlier, FRA carefully evaluated whether FRA's proposed action in funding the train box is substantially the same as the FTA action documented in the 2004 EIS and concluded that it is. After extensive evaluation of the 2004 EIS, FRA has also concluded that the 2004 EIS adequately assessed the environmental impacts associated with the train box and meets the standards of the CEQ Regulations. Further, FRA has concluded that the 2004 EIS is still accurate, adequate, and valid after conducting an Environmental Reevaluation of the 2004 EIS under FRA's Procedures for Considering Environmental Impacts.

Joseph C. Szabo, Administrator Federal Railroad Administration

[Date]

#### APPENDIX A-MITIGATION MONITORING PLAN

APPENDIX B—SECTION 106 MEMORANDUM OF AGREEMENT AND AMENDMENT 1