



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

EO-2112
jr

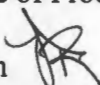
Office of Environmental Analysis

MEMORANDUM

June 12, 2013

TO: Daniel Elliott, Chairman
Ann Begeman, Vice Chairman
Francis Mulvey, Commissioner

CC: Rachel Campbell
Director, Office of Proceedings

FROM: Victoria Rutson 
Director, Office of Environmental Analysis

DATE: June 12, 2013

SUBJECT: Docket No. FD 35724, California High-Speed Rail Authority –
Construction Exemption – in Merced, Madera and Fresno Counties, Cal.,
Review of Environmental Matters

This memorandum summarizes the environmental review process for the California High-Speed Rail Authority's (Authority) proposed construction exemption, sets forth key environmental topics associated with the project, addresses issues raised in response to Office of Environmental Analysis' (OEA's) adoption notice of the previously-prepared environmental impact statement (EIS), and presents OEA's final recommendations to the Board regarding adopting the EIS, the preferred alternative, and mitigation.

1.0 INTRODUCTION

By petition for exemption (Petition) filed on March 27, 2013, the Authority seeks authority to construct a high-speed train (HST) rail line between Merced and Fresno, California (Merced to Fresno HST Section). Concurrently on March 27, 2013, the Authority filed a motion to dismiss (Motion to Dismiss) its Petition asserting that the Merced to Fresno HST Section does not require the Board's construction authority under 49 U.S.C. § 10901.¹ In a decision issued April 18, 2013, the Board found that it has jurisdiction over the Authority's HST project, and consequently, denied the Motion to

¹ The Authority's Petition and Motion to Dismiss are available on the Board's Web site at www.stb.dot.gov (click on "Filings" under "Quick Links," then search by Docket # "FD" and "35724").

Dismiss. The April 18th decision also established a procedural schedule for the public to comment on the legal and economic merits of the Authority's Petition and specified May 8, 2013, as the deadline for merit-related replies to the Petition.

In its Petition, the Authority explains that the Merced to Fresno HST Section (i.e., the project) would be the first of nine sections of a planned California HST System, which would provide intercity, high-speed passenger rail service over more than 800 miles throughout California and connect the major population centers of the state. The HST System would be an electric-powered train system with automated train controls and would operate at up to 220 miles per hour over a fully grade-separated and dedicated rail line. The Merced to Fresno HST Section would include passenger stations in the cities of Merced and Fresno (i.e., this section's termini), approximately 65 miles of double-tracked mainline, and four tracks at the two stations (i.e., two through tracks and two station tracks to load and unload passengers).

2.0 ENVIRONMENTAL REVIEWS

2.1 Environmental Reviews by Others

Previous environmental reviews were conducted jointly by the Authority and the Federal Railroad Administration (FRA). During these reviews, the Authority was the lead state agency for compliance with the California Environmental Quality Act (CEQA) and FRA and the Authority were joint co-leads for compliance with the National Environmental Policy Act (NEPA). These joint reviews produced single environmental review documents titled "environmental impact reports/environmental impact statements" (EIR/EIS) to meet the obligations of both CEQA and NEPA, respectively. The preparation of single environmental review documents, which cover both Federal and state environmental requirements, is consistent with Council on Environmental Quality (CEQ) regulations at 40 C.F.R. § 1506.2.

2.1.1 Programmatic EIRs/EISs by the Authority and FRA

The Authority and FRA began the environmental review process for the California HST System by preparing two programmatic or Tier 1² EIR/EIS documents to facilitate the selection of preferred alignments and station locations across the proposed system. These selections enabled the Authority and FRA to advance to project-level analyses in Tier 2 EIR/EISs. For the California HST System, the Authority and FRA are preparing a project-level EIR/EIS for each of the nine proposed HST sections.

² CEQ's NEPA regulations at 40 C.F.R. § 1502.20 encourage the use of tiering, which is the preparation of an area-wide or program-level EIS (i.e., Tier 1 document) followed by project-specific EISs (i.e., Tier 2 documents). Tiering eliminates repetitive discussions of the same issues and enables Tier 2 documents to incorporate applicable Tier 1 information by reference and to have focused analyses on issues ripe for decision making. CEQA also encourages tiering.

In 2005, the Authority and FRA finalized the first Tier 1 document: the Final Program EIR/EIS for the Proposed HST System (Program EIR/EIS).³ This document provided a programmatic analysis on implementing the HST System across the state, from Sacramento in the north, to San Diego in the south, and the San Francisco Bay Area to the west. The document also enabled the Authority and FRA to select preferred alignments and station locations for most of the California HST System to analyze further in Tier 2 documents.

The Authority and FRA then finalized the second Tier 1 document in 2008: the Bay Area to Central Valley HST Program EIR/EIS. However, as a result of two CEQA litigation cases, the document was revised and reissued by the Authority as a Revised Final EIR/EIS in 2010 and again as a Partially Revised Final EIR/EIS in 2012.⁴

2.1.2 Merced to Fresno Section EIR/EIS by the Authority and FRA

For the Merced to Fresno HST Section, FRA and the Authority were again joint lead agencies for Federal reviews under NEPA, and the Authority was lead agency for state reviews under CEQA.⁵ The U.S. Army Corps of Engineers (USACE) and the Bureau of Reclamation⁶ also served as cooperating agencies in the Federal environmental review of the project. FRA and the Authority jointly began the environmental review process for the Merced to Fresno HST Section in 2009 and issued a Draft Project EIR/EIS in August 2011. Considering information in and comments received on the Draft EIR/EIS, FRA and the Authority issued a Final Project EIR/EIS in April 2012.

The two-volume, approximately 11,000-page Final Project EIR/EIS identifies the purpose and need of the proposed project, evaluates a reasonable range of build alternatives (as well as the no-action alternative), assesses the potential impacts of the alternatives to applicable natural and man-made resources, and identifies an extensive list of measures to avoid, minimize and mitigate potential impacts. Resource areas and topics addressed in the Final EIR/EIS include transportation, air quality and climate change, noise and vibration, land use and biological resources. Potential cumulative impacts and potential disproportionate impacts to low-income and minority communities are also addressed.

³ This document is available on the on the Authority's Web site at http://www.hsr.ca.gov/Programs/Environmental_Planning/EIR_EIS/index.html.

⁴ These documents are available on the Authority's Web site at http://www.hsr.ca.gov/Programs/Environmental_Planning/bay_area.html.

⁵ The EIRs/EISs for the remaining eight HST sections are either currently in preparation or in the planning stages. OEA has requested that FRA grant the Board cooperating agency status for these eight NEPA documents.

⁶ The Bureau of Reclamation is a cooperating agency but does not have jurisdiction over a permit or approval for this section of the HST System.

FRA issued a Record of Decision (ROD) on September 18, 2012.⁷ Based on an analysis of potential project impacts and substantive agency and public comments, FRA approved a Preferred Build Alternative that includes the north-south Hybrid Alternative, and the Downtown Merced Station and Downtown Fresno Mariposa Street station alternatives from the Final Project EIR/EIS. The ROD directed the Authority to comply with extensive mitigation conditions.

2.2 OEA's Environmental Review

2.2.1 Merced to Fresno Section Final EIR/EIS Review and Adoption

CEQ's regulations allow Federal agencies, such as the Board, to adopt the environmental documents prepared by another Federal agency when the proposed actions are "substantially the same" and the adopting agency has concluded that the initial statement meets the standards for an adequate statement under CEQ's regulations (40 C.F.R. § 1506.3). Furthermore, the CEQ regulations state that when actions are substantially the same, "the agency adopting the agency's statement is not required to recirculate it except as a final statement."

OEA conducted an independent review of the 2012 Final Project EIR/EIS for the purpose of determining whether the Board could adopt it under 40 C.F.R. § 1506.3. OEA preliminarily concluded that (1) the proposed construction specified in the Authority's Petition for Exemption is substantially the same as that described in the Final Project EIR/EIS; (2) the Final Project EIR/EIS adequately assessed the potential environmental impacts associated with the proposed Merced to Fresno HST Section and meets the standards of CEQ's NEPA regulations and the Board's own environmental regulations at 49 C.F.R. Part 1105; and (3) to satisfy its NEPA obligations, the Board could adopt the Final Project EIR/EIS in any decision finding jurisdiction over the project and ruling on the Authority's request for construction authority.

On April 12, 2013, OEA published a notice of the proposed adoption on the Board's Web site and in the Federal Register. The notice discussed OEA's independent review of the Final Project EIR/EIS, OEA's three preliminary conclusions noted above, and requested comments on the proposed adoption by May 20, 2013. Because of the multi-volume size of the Final Project EIR/EIS and its continued availability in the libraries of the affected communities and the Authority's Web site, OEA did not republish the document. This would have been unduly costly, would have defeated CEQ's goals of reducing paperwork and duplication effort, and would be of little additional value to other agencies or the public. The Final Project EIR/EIS remains available on the Authority's Web site⁸ and at local libraries in the following California

⁷ FRA's ROD is available on FRA's Web site at <http://www.fra.dot.gov/Page/P0465>.

⁸ See the Authority's Web site at http://www.hsr.ca.gov/Programs/Environmental_Planning/final_merced_fresno.html.

communities: Atwater, Chowchilla, Fresno, Le Grand, Los Banos, Madera, and Merced. OEA also mailed the adoption notification to the approximately 700 recipients of the Final Project EIR/EIS at the time it was issued by FRA and the Authority in April 2012, as well as the parties of record to the Board's proceeding, as of April 12, 2013.

In accordance with the U.S. Environmental Protection Agency's (EPA) regulations (40 C.F.R. § 1506.3(b)) and guidelines (EIS Filing System Guidance, 77 Fed. Reg. 51530-51532) regarding the filings of adopted EISs, OEA also provided EPA with its notice of Final Project EIR/EIS adoption recommendation and electronically filed the recirculated Final Project EIR/EIS with EPA on April 12, 2013. Consistent with its usual practice of providing public notice of all Draft and Final EISs issued by Federal agencies, EPA published its own notice of availability of the recirculated Final Project EIR/EIS in the Federal Register on April 19, 2013. In addition to providing notice of the proposed adoption, EPA's notice provided contact information at OEA and restated the deadline of May 20, 2013 for public comments on the proposed adoption.

At the close of the comment period on May 20, 2013, OEA received 15 comments on the proposed EIS adoption. A summary of the major concerns raised in these comments is provided in Section 4.0 of this memorandum.

The final stage of the environmental review process under NEPA would be the issuance of the Board's final decision on the Petition deciding whether to authorize the Authority's proposed construction, and deciding whether it adopts OEA's recommendations, including OEA's recommendations regarding Final Project EIR/EIS adoption, the preferred alternative and mitigation, taking into account the substantive comments received in response to OEA's notice of proposed Final Project EIR/EIS adoption.

2.2.2 Memorandum of Agreement for Historic Review Process

Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. § 470 et seq.) imposes a responsibility on Federal agencies to "take into account the effect of" their licensing decisions (in this case, whether to grant the Authority's request for authority to construct, also called the "undertaking" under NHPA) on properties included in, or eligible for inclusion in, the National Register of Historic Places (National Register), and prior to the approval of an undertaking, to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. Consultations with the State Historic Preservation Officer (SHPO) are also required. If the undertaking would have an adverse effect on historic properties, the agency must continue to consult to resolve the adverse effects.

As the lead Federal agency, FRA initiated the Section 106 consultation process for the Merced to Fresno HST Section prior to OEA's involvement. During that process, FRA consulted with the California SHPO, ACHP and other interested parties. The parties executed a Programmatic Agreement setting out a general process for Section 106 compliance for the proposed entire 800-mile system on June 11, 2011. The Section 106 consultation process, as well as evaluations conducted during the NEPA review, identified properties that are included in, or eligible for inclusion in, the National Register

that would be adversely affected by the Preferred Build Alternative. Due to access restrictions, surveys for archaeological properties are incomplete; and therefore, additional National Register-eligible properties could be present. The regulations implementing Section 106 allow for the development of a Memorandum of Agreement (MOA) when the effects of an undertaking cannot be fully determined prior to approval of an undertaking. When there would be an adverse effect, the MOA can also establish responsibilities for the treatment of historic properties, implementation of mitigation measures, and ongoing consultation efforts. In this case, FRA, SHPO and the Authority executed an MOA that outlines additional surveys, historic property treatment, mitigation measures and other efforts (ACHP chose not to participate).

In order to satisfy the Board's obligations under Section 106, OEA, on behalf of the Board, requested that OEA be added as a Signatory to the existing MOA. A draft of the amended MOA adding OEA as a Signatory is set forth in Attachment 1. Execution of the MOA occurred on June 11, 2013.

3.0 OVERVIEW OF KEY ENVIRONMENTAL TOPICS

3.1 Purpose and Need

According to the Authority's Petition, the Final Project EIR/EIS, and FRA's ROD, the Fresno to Merced HST Section would be the first of nine sections of the planned California HST System to be constructed. The purpose of the Merced to Fresno HST Section is to provide the public with electric-powered, high-speed rail service that provides predictable and consistent travel times between major urban centers and connectivity to airports, mass transit systems, and the highway network in the south San Joaquin Valley, and to connect the northern and southern portions of the HST System (Final Project EIR/EIS, p. 1-4). Once the Merced to Fresno HST Section is constructed (and prior to build-out and operation of the entire HST System), the Authority would make the rail line available for use by Amtrak's San Joaquin Route, which would result in improved and faster service for Amtrak's customers (Final Project EIR/EIS, p. 2-101).

The record before FRA indicates that without the proposed HST System, congestion within the current and future intercity transportation system, including the central part of the San Joaquin Valley, would continue to result in deteriorating air quality, reduced reliability, and increased travel times. The current transportation system in the San Joaquin Valley region has not kept pace with the increase in population, economic activity, and tourism. The interstate highway system, commercial airports, and conventional passenger rail systems serving the intercity market are operating at or near capacity and would require large public investments for maintenance and expansion to meet existing demand and future growth over the next 25 years or beyond (FRA ROD, p. 11 and 12).

The record before FRA also indicates that the feasibility of expanding many major highways and key airports is uncertain. Some facilities require expansions that could be impractical or constrained by physical, political and other factors (FRA ROD, p. 12).

Once completed, the entire system would provide intercity, high-speed passenger rail service on more than 800 miles of rail line throughout California, connecting the major population centers of Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, the Inland Empire, Orange County, and San Diego (Petition, p. 3).

3.2 Alternatives

The Final Project EIR/EIS considers three build alignments for the Merced to Fresno HST Section: the UPRR/SR 99 Alternative, the BNSF Alternative, and the Hybrid Alternative. The UPRR/SR 99 Alternative generally follows the Union Pacific Railroad Company rail line and State Route (SR) 99 roadway corridors, which connect the cities of Merced, Chowchilla, Madera and Fresno. The BNSF Alternative generally parallels the BNSF Railway Company rail line corridor, which travels east from Merced through Planada, Le Grand, and Madera Acres, and then veers back west to reconnect with the UPRR/SR 99 Alternative again before entering the city of Fresno. The Hybrid Alternative follows the UPRR/SR 99 Alternative near Merced and the BNSF Alternative near Madera Acres.

Regarding HST stations, the Final Project EIR/EIS considers one station location in downtown Merced and two station alternatives in downtown Fresno (i.e., at Mariposa Street and Kern Street). Statewide, the HST System would also require one heavy maintenance facility (HMF) to be located somewhere in the Central Valley. The Final Project EIR/EIS considers five alternative locations. According to the Authority, all five HMF alternatives will be carried forward for additional study, consideration, and decision making as part of the San Jose to Merced Section and Fresno to Bakersfield Section EIR/EISs.

Alternative wye⁹ connections and east-west alignments that would connect the Merced to Fresno HST Section to the San Jose to Merced HST Section were also considered. All three east-west connections and wyes were carried forward by the Authority and FRA for additional study and decision-making in the San Jose to Merced HST Section EIR/EIS process.

The no project or no-action alternative was also evaluated by the Authority and FRA. This alternative represents the state's current transportation system and as it would be after implementation of programs or projects that are currently projected in regional transportation plans and that are expected to be funded and in place by 2035.

3.3 Potential Impacts of the Preferred Build Alternative

The potential impacts of constructing and operating the Preferred Build Alternative, which consists of the Hybrid Alternative, and the Downtown Merced Station and Downtown Fresno Mariposa Street station alternatives, as selected by FRA in its

⁹ A wye is where a rail line branches off a main line to continue in a different direction, forming a "Y"-like shape.

ROD, are discussed below. OEA's summary of impacts is drawn from the Merced to Fresno Section Final EIR/EIS and FRA's subsequent ROD.

3.3.1 Transportation

The Preferred Build Alternative would benefit the regional transportation system by diverting intercity trips from the regional roadway system to high-speed rail. These diverted trips would reduce the overall number of vehicle trips on the regional roadway system, improve future levels of service on roadways, and reduce overall vehicle miles traveled (Final Project EIR/EIS, p. 3.2-26). The HST would also reduce demand and substitute for commercial air travel in California (Final Project EIR/EIS, p. S-14). Interim use of the Merced to Fresno HST Section by Amtrak would result in improved and faster service on Amtrak's San Joaquin Route (operated with conventional speed, diesel trains) (Final Project EIR/EIS, p. 2-101).

The Preferred Build Alternative would result in intersection and roadway impacts in the Fresno area between Herndon and Shaw avenues, but would be mitigated by modifying signal timing, adding signals in some locations, widening approaches to some intersections, and adding lanes or grade separating in some locations. Approximately 2 miles of SR 99 would be relocated and would result in station area impacts during HST operation. These impacts would be mitigated by the addition of a southbound auxiliary lane to SR 99, roadway widening, additional turn lanes, restriping and traffic signal improvements (Final Project EIR/EIS, p. S-14 and S-15). New grade-separated crossings would occur at intervals of approximately 2 miles (Final Project EIR/EIS, p. S-21 and S-22); however, between 30 and 36 local roadways would still be permanently closed (Final Project EIR/EIS, p. 3.2-26).

3.3.2 Air Quality and Climate Change

As explained in the Final Project EIR/EIS and FRA's ROD, the Preferred Build Alternative would have the least construction-related impacts of the build alternatives. Nevertheless, construction emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) would contribute substantially to violations of air quality standards in the San Joaquin Valley Air Basin (SJVAB). If ballast material is hauled from quarries in the South Coast Air Basin (SCAB), NO_x could exceed air quality standards in the SCAB. The Authority would be required to mitigate construction emissions through the use of standard best management practices, reducing criteria exhaust emissions from on-road and off-road construction equipment, and by providing funds to projects that achieve emission reductions, thus offsetting construction emission impacts (Final Project EIR/EIS, p. S-15).

Operation of the HST would result in a net benefit to air quality because the HST project would result in lower mobile source air toxics, greenhouse gases, VOCs, NO_x, carbon monoxide and particulate matter emissions by diverting trips from transportation modes with higher emissions (i.e., automobile trips and commercial air flights) to high-speed rail, which has lower emissions (FRA ROD, p. 26).

3.3.3 Noise and Vibration

Construction activities (particularly pile driving) would have the potential to result in building damage from vibrations if the activity occurs within 50 feet of existing buildings. Mitigation adopted in FRA's ROD, however, would include preconstruction surveys to document the existing conditions of buildings located within 50 feet of proposed pile-driving activities. After mitigation, construction noise and vibration impacts would be reduced to negligible (Final Project EIR/EIS, p. S-15).

Without mitigation, HST operations under the Preferred Build Alternative would cause severe noise impacts for up to 525 sensitive receivers (largely residences, but also three hotels, one park and one church) (Final Project EIS/EIS, p. 3.4-39). The Preferred Build Alternative would also shift a section of SR 99 closer to sensitive receptors and would result in 221 residences and one hotel being exposed to severe traffic noise impacts (Final Project EIR/EIS, p. 3.4-45). However, mitigation adopted by FRA in its ROD, which includes the installation of noise barriers, would reduce noise impacts to less than severe for most sensitive receptors (Final Project EIR/EIS, p. 3.4-54 and FRA ROD, Appendix C, Mitigation Measure N&V-MM#1 through #6).

During HST operations, there would be no vibration impacts because of soil conditions in the project corridor, low vehicle input force, and the presence of elevated structures, all of which substantially attenuate vibration levels in heavily populated areas (Final Project EIR/EIS, p. 3.4-43).

3.3.4 Biological Resources and Wetlands

Construction of the Preferred Build Alternative would not result in significant impacts to biological resources or wetlands after mitigation required by FRA is implemented (FRA ROD, p. 27). Construction of the HST rail line would permanently remove the vegetative cover within the construction footprint along with any associated potential habitat for special-status species;¹⁰ permanently impact wetlands and other jurisdictional waters protected under the Clean Water Act (CWA) (33 U.S.C. § 1251 *et seq.*); and traverse the Camp Pashayan Ecological Reserve. These impacts would be reduced to negligible with mitigation required by FRA (Final Project EIR/EIS, p. S-16).

Operation of the HST could spread noxious weed species and would bisect existing habitat that has the potential to support special-status species. HST operations would indirectly affect CWA jurisdictional waters, the Great Valley Conservation Bank and the Camp Pashayan Ecological Reserve. FRA-required mitigation includes weed prevention and control, environmental training, delineating environmentally sensitive locations, implementing a biological resources plan, implementing special-status species protection measures, and restoring temporarily affected areas. These measures and others would reduce operation impacts to negligible (Final Project EIR/EIS, p. S-16).

¹⁰ Special-status species includes plants and animals that are protected under the federal Endangered Species Act (42 U.S.C. § 4321 *et seq.*), the California Endangered Species Act, California Native Plant Protection Act, and other statutes and regulations.

3.3.5 Water Resources

The Preferred Build Alternative would cross either 23 or 29 natural water bodies (depending on the wye that would be constructed). Most of these water bodies would require in-water work for the construction of supporting piers associated with crossings. Construction impacts of these crossings would be minimized through compliance with CWA permits and implementation of appropriate best management practices (BMPs). The crossings would also be designed to maintain existing hydraulic capacity and connectivity to ensure that no operational impacts on hydrology and floodplains would occur. Potential impacts to groundwater would be negligible (Final Project EIR/EIS, p. 3.8-25).

3.3.6 Land Use

Depending on the wye connection, the Preferred Build Alternative would require 1,100 to 1,139 property acquisitions, including 186 to 213 residential displacements and 212 to 226 business displacements (Final Project EIR/EIS, page S-21). This would be the fewest number of displacements of the three build alternatives. The total land area to be converted to HST use would range from 1,720 to 1,995 acres. The HST could result in increased development densities and other transit-oriented development in and around the HST stations in Merced and Fresno (Final Project EIR/EIS, p. 3.13-20).

The Preferred Build Alternative would result in the permanent conversion of agricultural land to nonagricultural uses, permanent access severance, and conflicts with farmland protection contracts (Final Project EIR/EIS, p. 3.14-29). Between 1,273 and 1,426 acres of important farmland would be converted to nonagricultural use. This includes 285 to 300 acres of prime farmland, 278 to 464 acres of farmland of statewide importance, 517 to 535 acres of unique farmland, and 143 to 178 acres of farmland of local importance (Final Project EIR/EIS, p. 3.14-32). The Preferred Build Alternative would likely sever approximately 80 large farm parcels in areas that are not adjacent to existing transportation corridors (Final Project EIR/EIS, p. 3.14-34).

Mitigation measures required by FRA would preserve land for agriculture and consolidate remnant parcels so that they remain in agricultural production. The Authority would be required to enter into a contract with the California Department of Conservation to provide agricultural land mitigation services including the establishment of permanent conservation easements on land of similar acreage, location, and quantity to that which would be affected by the HST rail line. These measures would prevent future losses of currently unprotected farmland, but would not create new farmland or replace the converted farmland. Therefore, even with the mitigation, the farmland loss is considered significant (FRA ROD, p. 30 and 31).

3.3.7 Parks and Recreation

Installation of piers for an elevated guideway would require the permanent acquisition of 0.6 acre of San Joaquin River Ecological Reserve at Camp Pashayan, which represents about 2 percent of Camp Pashayan's total area. HST construction would also limit access to a small portion of the park for up to four years. Even though the Authority would compensate the park's owner (the California Department of Fish and Game) for construction staging in the park, the potential impacts to the park would remain significant (FRA ROD, p. 31). Camp Pashayan is located in the City of Fresno on the San Joaquin River. Activities at the park include picnicking, fishing, boating, and nature trail hiking (Final Project EIR/EIS, p. 3.15-11 and 3.15-14).

Under FRA's required mitigation, the Authority would install a sound barrier to reduce potential noise impacts on Roeding Park to a less than significant level under HST operating conditions (FRA ROD, p. 31). Roeding Park is located in the City of Fresno and its amenities include athletic fields, a dog park, picnicking facilities (e.g., barbecues, shelters and tables) and boat rentals (Final Project EIR/EIS, p. 3.15-14).

3.3.8 Aesthetics and Visual Resources

The architecture of the HST stations in Merced and Fresno and landscape improvements in the vicinity of the stations would enhance visual resources. All of the build alternatives would permanently lower the visual quality west of SR 99 because of the construction of elevated grade-separated crossings and elevated guideway and sound barriers along the guideway. These structures would remove orchards and fields, block views, and degrade the visual quality beyond the HST rail line. Although mitigation measures such as the planting of trees and other vegetation would be implemented by the Authority, potential visual impacts would remain significant. Traction power stations for the HST would potentially alter the visual character of adjacent lands. The Authority intends to use physical or vegetative screening to reduce these visual impacts to less than significant (FRA ROD, p. 31).

3.3.9 Socioeconomics and Environmental Justice

Construction of the proposed section of the Merced to Fresno HST Section would temporarily benefit the regional economy through construction spending, job creation and increased sales tax revenue. Special recruitment, training, and employment programs would be implemented to employ individuals from low-income and minority communities. Once the HST rail line was operational, local communities would benefit from improved traffic conditions on freeways, improvements in air quality, new employment opportunities, and increased tax revenue (FRA ROD, p. 29).

The Preferred Build Alternative would result in adverse effects on low-income and minority populations. However, with mitigation required by FRA, potential noise impacts on these populations in Merced and Fresno, and potential visual impacts, displacements, and relocations on these populations in Madera and Madera Acres would not be greater than on the general population. Therefore, potential impacts on these populations are not considered to be disproportionate (FRA ROD, p. 29).

Potential visual impacts, displacements, and relocations in the community of Fairmead could result in significant impacts on low-income and minority populations even with mitigation measures required by FRA (FRA ROD, p. 29 and 30).

3.3.10 Cultural Resources

Construction of the Preferred Build Alternative could affect up to four known archaeological resources on this north-south alignment. The Preferred Build Alternative would also cross streams and rivers that are considered to be sensitive to prehistoric archaeological resources (Final Project EIR/EIS, p. 3.17-68). Due to access restrictions, surveys for archaeological resources are incomplete and would be addressed under the Section 106 MOA process. Mitigation measures, such as halting construction if a previously undiscovered archaeological site is discovered, conducting archaeological monitoring and preservation in place if avoidance is not feasible, would reduce potential impacts to archaeological resources to less than significant (Final Project EIR/EIS, p. 3.17-81 through 3.17-91).

Under Section 106 of the NHPA, construction of the Preferred Build Alternative would cause a direct adverse effect on two historic properties (Weber Avenue Overcrossing and Belmont Subway and Traffic Circle), and an indirect adverse effect on three additional historic properties (Roeding Park, Southern Pacific Railroad Depot - H Street; and Bank of America - F Street). The Downtown Merced and Downtown Fresno Mariposa Street station alternatives would not have any direct or indirect adverse effects on Section 106 properties. Even with treatment measures such as relocating structures, preparing and submitting nominations to the National Register, preparing structural reports, and creating interpretative exhibits, potential impacts to historic properties would remain significant (Final Project EIR/EIS, p. 3.17-75 and 3.17-76).

Approximately 87 percent of the total construction footprint occurs in areas with moderate paleontological sensitivity (i.e., presence of fossil-containing deposits) (Final Project EIR/EIS, p. 3.17-80). Sediments in these areas have the potential to yield fossils of extinct Pleistocene vertebrates including sloths, mammoth, North American camel, and other large mammals of ancient California. Mitigation measures, such as monitoring, implementing a paleontological plan, and halting construction when paleontological resources are found, would reduce impacts to less than significant (Final Project EIR/EIS, p. 3.17-89 and 3.17-90).

3.3.11 Cumulative Impacts

The Preferred Build Alternative could cause a cumulative impact when considered together with other past, present, and reasonably foreseeable projects. Most of these potential cumulative impacts would be moderate or negligible (Final Project EIR/EIS, Section 3.19). However, potential incremental increases in noise within urban areas would be cumulatively significant (Final Project EIR/EIS, p. 3.19-10); potential cumulative impacts to wetlands would be substantial because of the amount of land being converted to urban and transportation uses (Final Project EIR/EIS, p. 3.19-16); and the

potential cumulative impacts to farmland from ongoing conversion to non-agricultural uses would be substantial (Final Project EIR/EIS, p. 3.19-30). Compared with the no-action alternative, the Preferred Build Alternative would potentially improve some future environmental conditions because of the benefits provided by transit-oriented development near HST stations, reduced automobile travel, reduced air pollutant emissions, and increased economic activity (Final Project EIR/EIS, p. 3.19-5).

4.0 SUMMARY OF ISSUES RAISED IN RESPONSE TO OEA's ADOPTION NOTICE

In response to its April 12, 2013 notice of EIS adoption, OEA received comments from 15 parties including several local government agencies, citizen organizations, and land development interests, one local elected official, and one individual. Summaries of the major concerns expressed by these parties and OEA's responses to them are provided below.

4.1 OEA's Independent Review of the Final EIR/EIS

Several commenters state that OEA should have conducted an independent review of the Final Project EIR/EIS and prepared an environmental memo before making an adoption recommendation to the Board. Commenters also state that OEA should have provided more time for public participation. OEA notes that its actions are consistent with CEQ's regulations regarding EIS adoption (40 C.F.R. § 1506.3). As required by the regulations, OEA first conducted a thorough review of the Final Project EIS/EIS. This review enabled OEA to conclude that (1) the proposed construction specified in the Authority's Petition for Exemption is substantially the same as that described in the Final Project EIR/EIS; and (2) the Final Project EIR/EIS adequately assesses the potential environmental impacts associated with the proposed Merced to Fresno HST Section and meets the standards of CEQ's regulations and the Board's own NEPA regulations at 49 C.F.R. Part 1105.

OEA then published its April 12, 2013 notice asking for comments on its recommendation that the Board adopt the Final EIR/EIS in any decision granting the Authority's request to construct, and concurrently filed the notice of adoption with EPA. Consistent with EPA requirements, OEA set a 30-day comment period that commenced with EPA's April 19, 2013 Federal Register notice of the Final Project EIR/EIS adoption. At the conclusion of the comment period on May 20, 2013, OEA began preparing this environmental memorandum to present its final conclusions and recommendations to the Board. OEA notes that there are no regulations that pertain to the timing of an environmental memorandum of this nature. Nor is there a requirement that OEA prepare an environmental memorandum prior to making its adoption recommendation to the Board, as suggested by one commenter. Preparing a notice and then, following consideration of all public comments received on the notice, an environmental memorandum that makes a final recommendation was a reasonable and appropriate way for OEA to proceed with the environmental review process in this case.

4.2 EIS Tiering

One commenter states that the Final Project EIR/EIS does not adequately tier off or incorporate by reference the Bay Area to Central Valley HST Program EIR/EIS, which, as the result of two CEQA litigation cases, has been revised and reissued twice by the Authority. The commenter also states that the Board must adopt both programmatic, Tier 1 EISs.

OEA disagrees with these assertions. The Bay Area to Central Valley HST Program EIR/EIS, as a Tier 1 document, is not relevant to the Merced to Fresno HST Section with the exception of the wye analyses contained in the Merced to Fresno HST Section Final EIR/EIS. Moreover, because a decision on the preferred wye has been deferred (i.e., it is no longer ripe for decision), the Bay Area to Central Valley HST Program EIR/EIS is not relevant to the north-south Merced-Fresno alignment and station decisions made in the Final Project EIR/EIS. In addition, all three build alternatives considered in the Final Project EIR/EIS are compatible with each of the three wyes (Final Project EIR/EIS, p. 16-41); and therefore, a decision on the north-south Merced-Fresno alignment now before the Board would not improperly constrain or pre-determine the deferred decision on the wye.

As previously noted, the Final Program EIR/EIS provides a programmatic analysis on implementing the HST System statewide, and enabled the Authority and FRA to properly select preferred alignments and station locations for the Tier 2 EIR/EIS for the Merced to Fresno HST Section. Regarding incorporation by reference, OEA believes that the relevant Tier 1 EIS was adequately incorporated by reference in the Final Project EIR/EIS (e.g., see Chapters 1 and 2), as required by CEQ's regulations at 40 C.F.R. § 1502.3. Finally, there are no Federal regulations that require the Board to adopt either of the Tier 1 EIRs/EISs in this case. Because tiering and incorporation by reference were done properly, and because only the 65-mile Merced to Fresno rail line is now before the Board, it is appropriate for the Board to adopt only the Merced to Fresno HST Section Final EIR/EIS.

4.3 Segmentation

One commenter states that the Board should look at the potential environmental impacts of the entire statewide proposed HST system, and that a decision on the wye should not have been deferred. The commenter adds that a decision on the Merced to Fresno HST Section only (and without the wye) results in a segmented view of potential statewide impacts and averts the objectives and intent of NEPA. Another commenter states that the "real project" that should be addressed is the 130-mile Initial Construction Segment (ICS), and not the approximately 65-mile Merced to Fresno Section.

OEA disagrees that issuance of the Final Project EIR/EIS represents improper segmentation of the environmental review. As explained in response to the previous comment, OEA believes that FRA and the Authority properly tiered the HST System Program and Merced to Fresno Project EISs under NEPA. Furthermore, OEA concurs with FRA that the Merced to Fresno HST Section has independent utility under NEPA as well as the American Recovery and Reinvestment Act (ARRA), through which FRA

would provide final design and construction funding. For example, the Merced to Fresno HST Section is one of several logical sections that could support operation of passenger service between stations initially and as the system is expanded. In addition, Merced and Fresno are two of the largest cities in the San Joaquin Valley and represent logical termini for this section of the HST System (Final Project EIR/EIS, p. 16-28). As the Authority states in its 2012 Revised Business Plan, the Merced to Fresno HST Section could also be used by Amtrak prior to the start of HST service. For the same reasons, the Board does not need to consider the potential environmental impacts of constructing and operating the 130-mile ICS at this time.

4.4 Project Description

Two commenters state that the descriptions of the three build alternatives lack sufficient detail to enable an accurate review of potential environmental impacts. OEA disagrees. For example, based on the knowledge and experience OEA developed during the numerous environmental reviews in which the Board was the lead Federal agency, OEA notes that the level of detail in the project descriptions in Chapter 2 and the project drawings in Technical Appendix 2-B – Project Footprint of the Final EIR/EIS are typical at this stage in the design and environmental review processes for proposed rail lines. More importantly, the level of detail contained in the Project EIR/EIS is sufficient to have enabled FRA and the Authority to take a hard look at the potential environmental impacts of the three build alternatives.

4.5 Baseline Data

One commenter states that the Final EIR/EIS lacks an accurate description of the affected environment and criticizes baseline data collection methods. OEA believes that the affected environment description is adequate and that FRA's and the Authority's baseline data collection methods were reasonable. The Authority and FRA relied upon the most recent publically available data, and where appropriate, used field studies to collect additional data. When landowners refused to grant property access for field data collection activities, FRA and the Authority were forced to collect data by other reasonable methods. These methods included surveys from public rights-of-way and the review of recent aerial photography (Final Project EIR/EIS, p. 20-370). In some cases, such as for cultural resources, field surveys of the restricted-access areas were deferred until after a preferred alternative was selected and the Authority acquires land access (Final Project EIR/EIS, p. 3.17-66, 3.17-11 and 3.17-12). Cultural resources data collection, the treatment of any identified historic properties, responses to unanticipated discoveries during construction, and other topics are addressed in the Memorandum of Agreement among the FRA, STB, the Authority, and the SHPO.¹¹

¹¹ The amended MOA was executed on June 11, 2013. In adding the Board as a signatory, the amended MOA sets forth the Board's role and responsibilities under Section 106 of the National Historic Preservation Act.

4.6 Alternatives Carried Forward

Several commenters state that FRA and the Authority failed to comply with Proposition 1A, which requires the Authority to give primary consideration to rail alignments that use existing transportation corridors. The commenters state that the alternatives studied in the Final Project EIR/EIS deviate from existing transportation corridors and needlessly realign or destroy irrigation infrastructure. The commenters also state that an alternative that parallels Interstate 5 (I-5) should have been carried forward as a build alternative in the EIR/EIS.

OEA notes that these and similar comments were submitted on the Draft and Final Project EIRs/EISs and were previously responded to by FRA and the Authority (Final Project EIR/EIS, p. 2-19). OEA reviewed and concurs with these responses, which show that appropriate and reasonable choices were made regarding which alternatives to carry forward. For example, in the Final Project EIR/EIS comment responses, FRA and the Authority explain that while the alternatives analysis considered multiple criteria, the screening emphasized the use of existing transportation corridors and available rights-of-way (Final Project EIR/EIS, p. 16-7 and 16-8). Accordingly, contrary to the commenter's claims, the three build alternatives in the Draft and Final Project EIRs/EISs, do in fact follow existing freight transportation corridors of BNSF and UP.

FRA and the Authority also explain that the I-5 alignment was carefully considered and reasonably rejected for further study in the Final Program EIR/EIS. Although the I-5 corridor could possibly provide better travel times in some cases, the agencies ultimately concluded that it would not satisfy the project's purpose and need (Final Project EIR/EIS, p. 16-7 and 16-8). For example, the Final Project EIR/EIS explains that the I-5 corridor is geographically removed from where the bulk of the Central Valley population resides, and a HST rail line parallel to I-5 would result in lower ridership, fail to meet current and future intercity travel demands of the Central Valley communities, and fail to maximize intermodal transportation opportunities. The Final Project EIR/EIS also concludes that use of the I-5 corridor would encourage sprawl development which is the opposite of what the HST System is intended to achieve (Final Project EIR/EIS, p. 16-7 and 16-8).

4.7 Analysis of Potential Impacts

Several commenters criticize the analytical methods or conclusions in the Final Project EIR/EIS including those related to direct and indirect impacts, biological impacts, air quality impacts and water quality and supply impacts. For example, surveys to assess potential impacts to rare and endangered species are criticized as inadequate. Another commenter states that the EIR/EIS should have considered the potential impacts to existing BNSF Railway and Union Pacific Railroad freight rail lines. However, based on OEA's independent review of the Final Project EIR/EIS, OEA believes that the document was thoroughly prepared and takes the requisite hard look at potential environmental impacts. Regarding the first example on rare and endangered species surveys, FRA and the Authority adequately explain in response to a similar comment on the Draft Project EIR/EIS that the surveys for listed species vary along the alignments, with some surveys occurring only where access to private property was permitted. In restricted access areas,

surveys were based on habitat evaluations from publicly available roads and recent aerial photography (Final Project EIR/EIS, p. 20-370). Appropriately, FRA consulted and continues to consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service, as required by Section 7 of the Endangered Species Act. Thus, OEA believes the analysis of potential impacts in the Final Project EIR/EIS complies with NEPA.

Regarding impacts to existing freight rail lines, the Final Project EIR/EIS addresses security and safety topics including the use of minimum separation distances or barriers, as appropriate, between HST tracks and adjacent UPRR or BNSF tracks, right-of-way access restrictions and other topics (Final Project EIR/EIS, p. 3.2-36 and 16-75). Commenters transmitted letters of concern from UPRR and BNSF regarding the HST System. OEA notes that the Authority would be responsible for negotiating any necessary agreements with either UPRR or BNSF regarding the use of freight rights-of-way. The failure to reach any final agreement with either UPRR or BNSF to date does not mean that the Final Project EIR/EIS was inadequate.

4.8 Cumulative Impacts

One commenter states that the Final Project EIR/EIS failed to disclose and analyze cumulative impacts of pending and foreseeable projects (e.g., planned freeway and roadway improvements) and failed to discuss their timing and scale in the areas of air quality, noise, water, land use, etc. The commenter also asserts that the Final Project EIR/EIS failed to analyze the cumulative impacts of adjoining sections of the HST System project (e.g., the Fresno to Bakersfield HST Section). OEA has reviewed the cumulative impacts material in the Final Project EIR/EIS, including Section 3.19 (Cumulative Impacts), Appendix 3.19-A (Planned and Potential Projects and Plans), and Appendix 3.19-B (Planned and Potential Transportation Projects), and concludes that the Final Project EIR/EIS satisfies the requirements of CEQ's NEPA regulations at 40 C.F.R. §1508.7. The document properly identified the methods used in the analysis which appropriately included: defining the study area for each resource area (e.g., transportation, noise, air quality, biological resources); defining what constitutes a reasonably foreseeable future action; compiling a list and description of past, present, and reasonably foreseeable future projects; determining whether a project's incremental contribution to cumulative impacts for a given resource area would be cumulatively considerable; and identifying reasonable and feasible options for avoiding and mitigating potentially significant cumulative impacts. OEA is satisfied that these methods were properly implemented.

Regarding the consideration of adjoining sections of the HST System in the cumulative impacts analysis, FRA and the Authority state that the potential cumulative impacts of the entire 800-mile system as a whole are addressed in the Final Program EIR/EIS for the Proposed HST System (Final Project EIR/EIS, p. 16-2). OEA concurs that this was a reasonable approach to address the potential cumulative impacts of adjoining HST sections.

4.9 Environmental Justice

Several commenters criticize the potential disproportionate impacts to environmental justice communities (e.g., potential construction impacts on Madera County) and state that FRA's and the Authority's outreach efforts to low-income and minority populations were inadequate. Similar comments were submitted on the Draft Project EIR/EIS. FRA and the Authority acknowledge in the EIR/EIS that potential visual impacts, displacements, and relocations in the community of Fairmead in Madera County could result in significant impacts on low-income and minority populations, even with mitigation. FRA and the Authority note, however, that Executive Order 12898 (which requires the consideration of environmental justice concerns), also specifies that offsetting benefits associated with a proposed project should also be considered. FRA and the Authority state that that analysis shows that the Merced to Fresno HST Section would provide benefits that would accrue to all populations including environmental justice populations. For example, the project would improve mobility within the region, improve traffic conditions on freeways, improve air quality, and provide new employment opportunities during construction and operation. In addition, to help offset disproportionate effects, FRA and the Authority would implement special recruitment, job training and job set-aside programs specifically targeted to benefit environmental justice communities (FRA ROD, Mitigation Measure SO-MM#5). OEA concludes that FRA and the Authority have reasonably analyzed disproportionate impacts to low-income and minority communities, considered project benefits to these same communities, and offered reasonable and feasible mitigation to address potential disproportionate impacts.

The responses from FRA and the Authority also outlined their outreach activities to the general public as well as minority and low-income populations. FRA and the Authority noted that they identified and specifically engaged environmental justice-related interest groups in their outreach efforts. From 2009 through 2011, FRA and the Authority convened scoping meetings, workshops, public information meetings, and community meetings across the study area including in Chowchilla, Fairmead, Fresno, Madera, Merced, and Planeda. To maximize the effectiveness of the outreach activities, meetings notices and presentation materials were published in both English and Spanish. If required, Spanish, Lao, and Hmong language interpreters were made available at public meetings and hearings on the Draft Project EIR/EIS. In addition, presentations at the Merced Lao Family Community Center were also presented in Lao (Final Project EIR/EIS, p. 16-35, 16-36, 16-87 and 16-88). OEA believes that these outreach efforts are reasonable and adequate.

5.0 OEA'S FINAL ENVIRONMENTAL RECOMMENDATIONS

5.1 Final EIS Adoption

OEA has conducted an independent review of the Final Project EIR/EIS for the purpose of determining whether the Board could adopt it under 40 C.F.R. § 1506.3. Based on that independent review, and considering the public comments received on OEA's notice of Final Project EIR/EIS adoption, OEA concludes that (1) the proposed construction specified in the Authority's Petition for Exemption is substantially the same as that described in the Final Project EIR/EIS; and (2) the Final Project EIR/EIS

adequately assesses the potential environmental impacts associated with the proposed Merced to Fresno HST Section and meets the standards of CEQ's NEPA regulations and the Board's own NEPA regulations at 49 C.F.R. Part 1105. Accordingly, to satisfy its NEPA obligations, OEA recommends that the Board adopt the Final Project EIR/EIS in any decision granting the Authority's Petition.

5.2 Preferred Alternative

In its ROD, FRA approved the Preferred Build Alternative, which includes the Hybrid Alternative and the Downtown Merced and Downtown Fresno Mariposa Street station alternatives. OEA concurs with FRA that the Preferred Build Alternative is the environmentally preferable alternative.

As the FRA's ROD (pp. 19 and 21) explains, the Hybrid Alternative would result in the least or similar effects on biological resources compared to the other build alternatives. It would have the fewest effects on waters of the United States. Potential impacts on prime farmland would be similar to the UPRR/SR 99 Alternative, both of which would have up to a third fewer acres removed from production than would the BNSF Alternative. The Hybrid Alternative would avoid more community resources than the other two build alternatives. The Hybrid Alternative is also shorter in length than the BNSF Alternative and has less elevated guideway and fewer potential impacts on adjacent infrastructure than the UPRR/SR 99 Alternative. These differences would result in fewer emissions during construction and less disturbance on local traffic circulation. Regarding potential impacts to waters of the United States, the USACE and EPA concur that the Hybrid Alternative is the Least Environmentally Damaging Practicable Alternative; and therefore, would be consistent with the USACE's Clean Water Act, Section 404 permitting program and the EPA's Section 404(b)(1) Guidelines (40 C.F.R. Part 230).

Regarding the station alternatives, the Downtown Merced Station is consistent with the City of Merced's future land use plan for the downtown area, and the Mariposa Street Station would better serve the downtown transit improvements specified in the City of Fresno's published plans (FRA ROD, p. 22).

5.3 Mitigation

In its ROD, FRA adopted an approximately 150-page Mitigation Monitoring and Enforcement Plan (MMEP) that identifies all practicable means to avoid or minimize likely environmental harm caused by the Preferred Build Alternative.¹² The MMEP describes mitigation measures that would avoid, minimize, or compensate for potential adverse environmental impacts from constructing and operating the Merced to Fresno HST Section. FRA and the Authority developed the measures in consultation with

¹² The MMEP adopted by FRA, is attached to the ROD as Appendix C, and is available on the FRA's Web site at <http://www.fra.dot.gov/Page/P0465> (see ROD Appendices, Appendix C).

appropriate agencies and input from the public and other interested parties. The MMEP also includes mitigation measures to comply with CEQA. FRA's ROD requires the Authority to comply with all the mitigation measures in the MMEP.

Accordingly, in any decision granting the Authority's construction exemption for the proposed Merced to Fresno HST Section, OEA recommends that the Board adopt the MMEP in its entirety, and impose the following conditions:

- The California High Speed Rail Authority may construct the Preferred Build Alternative, identified as the environmentally preferable alternative by the Federal Railroad Administration (FRA), which consists of the Hybrid Alternative and the Downtown Merced and Downtown Fresno Mariposa Avenue station alternatives, subject to compliance with all the mitigation measures specified in the Mitigation Monitoring and Enforcement Plan imposed by FRA and provided as Appendix C to FRA's Record of Decision, dated September 18, 2012.
- The California High-Speed Rail Authority shall comply with the amended Memorandum of Agreement developed through the Section 106 process of the National Historic Preservation Act.

ATTACHMENT 1

**FIRST AMENDMENT
MEMORANDUM OF AGREEMENT**

**FIRST AMENDMENT TO
MEMORANDUM OF AGREEMENT**

AMONG THE FEDERAL RAILROAD ADMINISTRATION, THE SURFACE TRANSPORTATION BOARD, THE CALIFORNIA HIGH-SPEED RAIL AUTHORITY, AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE MERCED-FRESNO SECTION OF THE CALIFORNIA HIGH-SPEED TRAIN SYSTEM IN MERCED, MADERA, AND FRESNO COUNTIES

WHEREAS, the Federal Railroad Administration (FRA) and the California High-Speed Rail Authority (Authority) propose to construct a high-speed train (HST) system in California and have completed a Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Merced to Fresno Section of the HST Project (Undertaking), which consists of constructing a new rail alignment, stations, maintenance facilities, electrical substations, and other appurtenant facilities between Merced and Fresno; and

WHEREAS a Programmatic Agreement (PA) among FRA, the Advisory Council on Historic Preservation (ACHP), the California State Historic Preservation Officer (SHPO), and the Authority regarding compliance with Section 106 of the National Historic Preservation Act (16 United States Code [U.S.C.] § 470f) and in accordance with its implementing regulations (36 Code of Federal Regulations [CFR] Part 800), as it pertains to the California High-Speed Train Project, was executed on June 15, 2011 (**Attachment 1**); and

WHEREAS FRA has concluded that the Undertaking will have an adverse effect on historic properties, as documented in the Findings of Effect report for the Merced to Fresno Section of the high-speed rail system; and

WHEREAS, on August 31, 2012, the FRA, the Authority, and the California State Historic Preservation Officer (SHPO) entered into a Memorandum of Agreement (MOA) to fulfill the requirements of Section 106 of the National Historic Preservation Act (NHPA) for construction of the Undertaking; and

WHEREAS, on April 18, 2013, the Surface Transportation Board (STB) concluded that it has jurisdiction over the proposed California high-speed train system including the Merced to Fresno Section; and

WHEREAS, on May 2, 2013, the STB requested that it be added as a signatory to the MOA to fulfill its obligations under Section 106 of NHPA and the current signatories to the MOA concurred with STB's request to be added as a signatory to the MOA;

WHEREAS, the FRA shall remain the lead Federal agency for the undertaking; and

WHEREAS FRA and the Authority consulted with the SHPO and the ACHP pursuant to the PA and to 36 CFR Part 800 regulations regarding the Undertaking's adverse effects on historic properties, and have notified the ACHP of the adverse effect finding pursuant to 36 CFR § 800.6(a)(1). The FRA and the Authority invited the ACHP to participate in the MOA, and in a letter dated April 23, 2012, the ACHP declined to participate.

WHEREAS FRA and the Authority have determined that the character of the proposed Undertaking's operation and maintenance constrains the Undertaking's design in a manner that precludes the possibility of avoiding adverse effects on the subject historic properties as a result of the Undertaking's implementation, and have further determined that they will resolve such effects through the execution and implementation of this Amended MOA, as well as the Archaeological Treatment Plan (ATP; **Attachment 2**) and the Built Environment Treatment Plan (BETP; **Attachment 3**); and

WHEREAS, FRA and the Authority propose to phase identification of archaeological properties as provided for in Stipulation VI.E of the PA;

WHEREAS, in accordance with Stipulation V.A and V.B of the PA, the FRA and Authority consulted with affected local governments and other interested parties about the Undertaking and its effects on historic properties and have taken into account all comments received from them. The City of Madera, the City of Fresno, and Fresno County participated in the consultation and accepted FRA's and the Authority's invitation to be consulting parties to the development of the MOA, the ATP, and the BETP; and

WHEREAS in accordance with Stipulation IV.A.5 and IV.C.2 of the PA, FRA formally consulted with or has made a good faith effort to formally consult with the following federally recognized Native American tribes with ancestral ties to Madera, Merced, or Fresno counties and invited them to participate as consulting parties in the development of the MOA and the ATP: Big Sandy Rancheria of Mono Indians, Cold Springs Rancheria of Mono Indians, Santa Rosa Rancheria Tachi Tribe, the North Fork Rancheria of Mono Indians, the California Valley Miwok Tribe, the Table Mountain Rancheria, and the Picayune Rancheria of Chuckchansi; and

WHEREAS the California Valley Miwok Tribe, the Cold Springs Rancheria of Mono Indians, the North Fork Rancheria of Mono Indians, and the Santa Rosa Rancheria Tachi Tribe accepted FRA's invitation to be consulting parties to the development of the MOA and the ATP; and

WHEREAS in accordance with Stipulation IV.B.5, IV.C.1, and IV.C.2 of the PA, the Authority consulted with or made a good faith effort to consult with the following non-federally recognized Native American tribes with ancestral ties to Madera, Merced, or Fresno counties and invited them to participate as consulting parties in the development of the MOA and the ATP: Kings River Choinumni Farm Tribe, Dunlap Band of Mono, Choinumni Tribe of Yokuts, the Choinumne Tribe, the Traditional Choinumni Tribe, the North Fork Mono Tribe, the Sierra Nevada Native American Coalition, the Southern Sierra Miwok Nation, the North Valley Yokuts Tribe, and the Chowchilla Tribe of Yokuts; and

WHEREAS the North Fork Mono Tribe and the Chowchilla Tribe of Yokuts accepted the Authority's invitation to be consulting parties to the development of the MOA and the ATP; and

WHEREAS a list of abbreviations and acronyms, of which shall apply to this Amended MOA, is included in **Attachment 5**;

NOW, THEREFORE FRA, STB, the Authority, and SHPO agree the Undertaking will be implemented in accordance with the following stipulations in order to resolve the effects of the Undertaking on historic properties, and further agree that these stipulations shall govern the Undertaking and all its parts until this amended MOA expires or is terminated.

STIPULATIONS

The FRA shall ensure that the following stipulations of this Amended MOA are carried out as follows:

I. MODIFICATIONS TO THE AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the Undertaking consists of both a Built Environment and Archaeological APE and is described and depicted in **Attachment 4** (Figures 1 to 3) of this Amended MOA. The APE consists of approximately 60 linear miles of track on new alignment, with a right-of-way anticipated to average about 100 feet. The APE represents the maximum extent of any potential direct ground disturbance and of any indirect effects from the construction of the Undertaking. The APE was developed and agreed upon among FRA, the Authority, and the SHPO, and accounts for potential impacts on both archaeological and built-environment resources that may result from the construction and operation of the Undertaking.

If modifications to the Undertaking, subsequent to the execution of this Amended MOA, necessitate the revision of the APE, FRA, STB, and the Authority shall submit the revised proposed APE to SHPO. SHPO will have 15 days to review and concur on the APE. If SHPO does not concur, FRA, STB, and the

Authority will revise the APE based upon SHPO comment and resubmit for concurrence. SHPO will have 15 days to review and concur on this revised APE. Actions to be taken after any such modification shall be conducted in accordance with Stipulations VI.A and IX of the PA.

II. COMPLETION OF HISTORIC PROPERTIES IDENTIFICATION EFFORT FOR THE ARCHAEOLOGICAL APE PRIOR TO CONSTRUCTION

FRA, STB, and the Authority acknowledge that approximately 80% of the land in the Undertaking's APE had yet to be surveyed for archaeological resources at the time of the execution of the MOA, due to a lack of legal access to that land. As provided for in Stipulation VI.E of the PA, this Amended MOA addresses the development and implementation of a post-review identification and evaluation effort for the Undertaking. Completion of the historic properties identification effort will be consistent with Stipulation VI of the PA. FRA, STB, and the Authority shall provide the SHPO with the information necessary to document that efforts to identify and evaluate historic properties in the Undertaking's APE are sufficient to comply with 36 CFR § 800.4(b) and (c).

The completion of the phased historic properties identification effort may occur incrementally throughout the APE and will entail pedestrian archaeological survey of the as-yet unsurveyed portions of the APE and testing and evaluation of archaeological sites within the APE that cannot be avoided. For any archaeological site (except those identified as exempt from evaluation, per Attachment D of the PA) identified as a result of the post-review archaeological identification effort, the FRA, STB, and the Authority shall provide the SHPO with the information necessary to document that efforts to evaluate resources in the Undertaking's APE are sufficient to comply with 36 CFR § 800.4(c). The ATP describes the methods that will be employed to conduct archaeological site evaluations and specifies where and under what circumstances further efforts to identify significant archaeological deposits will take place within the areas of direct impact.

If testing is not combined with data recovery, the results of testing and evaluation work will be documented in an Archaeological Evaluation Report or Reports (AER). The results of the investigation will provide the basis for National Register of Historic Places (NRHP) and California Register of Historic Places (CRHR) eligibility recommendations. After review and concurrence of the findings by the Authority and FRA, and STB, the AER will be submitted to the SHPO and consulting parties for a concurrent 15-day review and comment period. If no objection is made within the 15-day review period, the AER will become final. Any disputes will be addressed under Stipulation V.C of this Amended MOA.

As allowed under Stipulation VI.C of the PA, this Amended MOA includes provisions for treatment plans that include use of a combined archaeological testing and data recovery program. When this approach is implemented, within 14 days of completion of the testing field work within a designated portion of the APE, the Principal Investigator will prepare a Field Summary Letter Report that describes the testing efforts and results within the designated area. The report will include recommendations regarding site eligibility based on the site integrity and the ability to address relevant research questions. With approval from the Authority, FRA, and STB, the letter will be submitted to SHPO with a request for concurrence within 15 days. If there is a disagreement, SHPO may conduct a field visit. If a disagreement remains after a field visit, then under Stipulation VI.D of the PA, FRA may forward a Determination of Eligibility documentation to the Secretary of the Interior for resolution in accordance with 36 CFR 800.4(c)(2). Upon SHPO concurrence, treatment will move into the data recovery phase for those resources identified as eligible properties. Where testing and data recovery are combined within a designated portion of the APE, the results of the treatment will be documented in a combined testing and data recovery report for the designated area. After completion of the analysis, a report will be submitted to SHPO and consulting parties for a concurrent 15-day review. If no objection is made within the 15-day review period, the report will become final. Any disputes will be addressed under Stipulation V.C of this Amended MOA.

III. TREATMENT OF HISTORIC PROPERTIES IDENTIFIED IN THE APE

This MOA outlines FRA's, STB's, and the Authority's commitments regarding the treatment of all historic properties, both currently known and yet-to-be-identified, that will be affected by the Undertaking. Two detailed historic property treatment plans have been prepared for the Undertaking. The **ATP, Attachment 2**, describes treatments for effects on archaeological properties and Native American traditional cultural properties. The **BETP, Attachment 3**, describes the treatments for effects on the built environment resources. The work described in the treatment plans will be conducted prior to construction, during construction, and/or after construction of the Undertaking. The treatments to historic properties known at the time of execution of the MOA are summarized in an impact/treatment table, organized by historic property, in **Attachment 6**. The treatment measures listed will be applied to historic properties affected in order to avoid, minimize, and/or mitigate impacts of the Undertaking. The Authority shall implement and complete the treatment measures within 2 years of completion of construction of the Undertaking, or earlier if so specified.

The Authority shall ensure that sufficient time and funding are provided to complete all necessary preconstruction commitments before disturbances related to the Undertaking occur. The contractor will consult with the Authority on each portion of the Undertaking to ensure that ground-disturbing activities are approved to proceed before any such activities occur.

A. Archaeological Treatment Plan

The ATP describes in detail the methods that will be employed to complete the historic properties identification effort within the Undertaking's APE as part of the phased identification of archaeological resources. More specifically, the ATP builds upon the identification efforts completed to date and specifies where and under what circumstances further efforts to identify significant archaeological deposits will take place within the Undertaking's areas of direct impact. The ATP also describes in detail the avoidance, minimization, and/or mitigation treatment measures for all currently known and yet-to-be-identified significant archaeological resources and Native American cultural resources affected by the Undertaking. FRA, STB, and the Authority commit to implementing the terms of the ATP. The major elements and commitments in the ATP include the following:

- **Project Personnel Roles and Responsibilities**
- **Archaeological survey/identification**
- **Archaeological evaluations/eligibility determinations**
- **Findings of effect determinations**
- **Establishment of environmentally sensitive areas (ESAs), where feasible**
- **Intentional site capping for preservation in place of significant archaeological sites, where feasible**
- **Data recovery excavations**
- **Procedures and protocols for archaeological monitoring during construction**
- **Procedures and protocols for unanticipated discoveries during construction**
- **Protocols for the treatment of human remains of Native American origin**

- **Responsibilities for consultation and coordination with Indian tribes**
- **Native American Graves Protection and Repatriation Act (NAGPRA) compliance (where applicable)**
- **Ownership and curation of archaeological materials**

As described in the Project Roles and Responsibilities section of the ATP, the cultural resources Principal Investigator (PI) is responsible for the preparation of all technical reports/deliverables necessary to satisfy the commitments of the ATP and for the submittal of those reports and deliverables to the Authority, FRA, and STB for review and approval. Upon review and approval by the Authority, FRA, and STB, the Authority is responsible for submitting the documentation to the SHPO and the consulting parties to this Amended MOA. The SHPO and the consulting parties to this Amended MOA shall have the opportunity to review and comment on all cultural resources documentation prepared under the terms of the ATP within 15 days, unless otherwise stated in the ATP. The documents and deliverables associated with the commitments detailed in the ATP are listed in Section 14.0 of the ATP. If the SHPO does not comment within 15 days, then the documentation will be considered final and work will proceed. Electronic submittals of draft documents for review and comment are acceptable.

B. Built Environment Treatment Plan

The BETP provides detailed descriptions of treatment measures for built environment historic properties located within the APE that will be affected by the Undertaking and are listed in **Attachment 6**. The treatments will be carried out by qualified professionals (see Section V.A, below). The treatment measures are included in the BETP and are intended to avoid, minimize, and/or mitigate adverse effects caused by the Undertaking. FRA, STB, and the Authority commit to implementing the terms of the BETP. The major elements and commitments in the BETP include the following:

- **Roles and Responsibilities**
- **Reporting, Monitoring, and Scheduling Procedures**
- **Pre- and Post-Construction Conditions Assessments**
- **Protection and Stabilization Plans**
- **Response Plan for Unanticipated Effects and Inadvertent Damage**
- **Historic American Landscape Survey / Historic American Engineering Record (HALS/HAER) Documentation Procedures**
- **Avoidance of Vibration Effects**
- **Avoidance and Mitigation of Noise Effects**
- **Historic Preservation Design Review**
- **Salvage of Architectural Details**
- **Preparation of Interpretive Materials and Exhibits**

As described in the Roles and Responsibilities section of the BETP, the Architectural History Principal Investigator is responsible for the preparation of all reports/deliverables necessary to satisfy the commitments of the BETP and for the submittal of those reports and deliverables to the Authority, FRA, and STB for review. Upon review and concurrence by the Authority, FRA, and STB, the Authority is responsible for submitting the documentation to the SHPO and consulting parties for review and comment. The SHPO and consulting parties to this Amended MOA shall have 15 days to review and comment on all cultural resources documentation prepared under the terms of the attached BETP, unless otherwise stated in the BETP. If the SHPO does not comment within 15 days, then the documentation will be considered final and work will proceed. Electronic submittals of draft documents for review and comment are acceptable.

IV. Unanticipated Discoveries During Construction

As described in the ATP, it is possible that previously unknown archaeological resources could be discovered during ground-disturbing construction activities associated with the Undertaking. The following protocols, which are also presented in the ATP, will be implemented in the event of such discoveries.

A. Protocols for Discoveries

If any potential archaeological resources are observed or suspected during construction, the onsite archaeological monitor will issue a temporary work stoppage to the equipment operator to allow for a closer inspection of the discovery. Work will be stopped within 50 feet of the discovery, or other such distance that is determined by the archaeological monitor to be necessary to avoid or minimize harm to the discovered archaeological resources. Construction activities may continue outside the area of the discovery, but the area of the discovery will remain undisturbed by construction activities until the archaeological monitor can complete an inspection. If the archaeological monitor determines that further investigation may be necessary, the archaeological monitor will notify and consult with the PI regarding the discovery. In accordance with Stipulation XI.B of the PA, if the PI determines that adverse effects on the resource can be avoided, no consultation with Amended MOA signatories and consulting parties is necessary. If the PI determines that the archaeological discovery appears NRHP-eligible and adverse effects cannot be avoided, the PI will issue a stop work order and will notify the Authority Representative (AR) of the discovery.

B. MOA Signatory Consultation

In accordance with Stipulation XI.B of the PA, the Authority will consult with the FRA and notify STB within 24 hours of a discovery for which a stop work order has been issued to determine whether the unanticipated discovery is an eligible or potentially eligible property that will be adversely affected by the Undertaking. If the Authority and FRA determine that the property is likely an eligible or potentially eligible property that would be adversely affected by the Undertaking, they will develop recommendations regarding the proposed treatment measures to minimize adverse effects on the discovered resource. Within 48 hours of the discovery, the Authority will notify the SHPO of the discovery by phone or email. The Authority, in consultation with the FRA, will provide the SHPO with the recommended approach to treating the discovery. Consultation with the SHPO on the discovery will be conducted via email and phone, with hard copy documentation on the treatment to follow. If the Authority and FRA determine, in consultation with the SHPO, that the unanticipated discovery is not eligible and no further investigation is warranted, the AR will notify the resident engineer that clearance has been granted to resume work in the area.

C. Consultation with Native American Tribes

In accordance with Stipulation XI.C of the PA, the Authority shall notify the FRA and then the Authority shall notify local affiliated Native American tribes (see recitals above) of any discoveries that have the potential to adversely affect properties of religious or cultural significance to them within 24 hours of the discovery. After reviewing such discoveries, the aforementioned Native American tribes can request further consultation on the Undertaking by notifying the FRA in writing within 48 hours of FRA providing notice of the discovery. For interested Native American groups that are not federally recognized, the Authority shall notify them of any discoveries that have the potential to adversely affect properties of religious or cultural significance to them within 24 hours of the discovery. After reviewing such discoveries, the interested Native American groups can request further consultation on the Undertaking by notifying the Authority in writing within 48 hours of the Authority providing notice of the discovery.

D. Evaluation and Treatment of Unanticipated Discoveries

Upon agreement between the signatories to this Amended MOA regarding the appropriate treatment for an unanticipated discovery, the Authority will direct that data recovery be conducted in accordance with an Unanticipated Discovery Memorandum, as described in the ATP. As soon as the data recovery fieldwork is completed, work in the area of the discovery can resume. An Archaeological Data Recovery Report will be prepared subsequently in accordance with the ATP.

V. ADMINISTRATIVE STIPULATIONS

A. Professional Standards and Report Dissemination

All activities regarding history, collections management, historical archaeology and prehistoric archaeology, architecture, landscape architecture, and architectural history that are accomplished pursuant to this Amended MOA will be carried out by or under the direct supervision of persons meeting the "Secretary of the Interior's Professional Qualification Standards" (36 CFR Part 61). The Authority and FRA will ensure that any additional professionals required to implement any of the provisions in this Amended MOA, the ATP, and/or the BETP will be appropriately qualified to undertake such tasks.

The Authority, FRA, and STB shall ensure that all reports resulting from implementation of the ATP and the BETP meet contemporary professional standards as specified in "The Secretary of the Interiors Standards for the Treatment of Historic Properties" (National Park Service 1995 and updates); the "Secretary of the Interior's Standards and Guidelines for Archaeological Documentation" (National Park Service 1983 and updates); and "The Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation" (*Federal Register* 2003) as well as applicable standards and guidelines outlined in the California Office of Historic Preservation's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* (OHP 1990) and California Office of Historic Preservation's *Guidelines For Archaeological Research Designs* (OHP 1991). Copies of all final reports will be provided to the SHPO, the Central California Information Center and the consulting parties.

FRA, STB, and the Authority shall ensure that the materials and records resulting from the activities prescribed by this Amended MOA are curated in accordance with 36 CFR Part 79 to the extent feasible.

B. Confidentiality

The signatories to this Amended MOA acknowledge that the handling of documentation regarding historic properties covered by this Amended MOA are subject to the provisions of § 304 of the National Historic Preservation Act of 1966, where federal land is involved and § 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archeological site information, where non-federal land is involved. Having so acknowledged, the signatories will ensure that all actions and documentation prescribed by this Amended MOA are consistent with said sections, as applicable. Stipulation XII of the PA regarding confidentiality remains in effect and also applies to actions and documentation prescribed by this Amended MOA.

C. Dispute Resolution

Should any signatory to this Amended MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FRA shall consult with such party to resolve the objection. If FRA determines that such objection cannot be resolved within fifteen (15) calendar days, FRA shall forward all documentation relevant to the dispute, including the FRA's proposed resolution, to the ACHP. FRA will also provide a copy to all signatories and concurring parties. The ACHP shall provide FRA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FRA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FRA will then proceed according to its final decision.

If the ACHP does not provide its advice regarding the dispute within the thirty-day (30-day) time period, FRA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FRA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to this Amended MOA, and provide them and the ACHP with a copy of such written response.

FRA's responsibility to carry out all other actions subject to the terms of this Amended MOA that are not the subject of the dispute remains unchanged.

D. Amendment

Any signatory party to this Amended MOA may propose that the MOA be further amended by notifying the other signatory parties in writing, whereupon all signatory parties shall consult for no more than 15 days to consider such an amendment. The amendment will be effective on the last date a copy of it is signed by all of the signatories in counterpart. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the MOA in accordance with Stipulation V.E, below.

To address changes in the Undertaking or the treatment of historic properties affected by the Undertaking, the Authority may propose revisions to one or both historic property treatment plans to the other parties to this Amended MOA. Upon the written concurrence of the SHPO, the Authority in coordination with FRA and STB may revise the plan(s) to incorporate the agreed-upon changes without executing a formal amendment to the MOA.

E. Termination

If any signatory believes that the terms of this Amended MOA are not being carried out or cannot be carried out, that party shall immediately notify the other parties in writing and consult with the other parties for a period of at least 30 days to attempt to develop an amendment per Stipulation

V.D above. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.

If within thirty (30) days, or another time period agreed to by all signatories, an agreement for the amendment to the MOA cannot be reached, any signatory may terminate the Amended MOA upon written notification to the other signatories. Termination hereunder shall render this Amended MOA without further force or effect.

If this Amended MOA is terminated for any reason, and FRA determines that the Undertaking will proceed, FRA will either execute a new MOA with the signatories under 36 CFR § 800.6(c)(1), or request, take into account, and respond to, the comments of the ACHP pursuant to 36 CFR § 800.7. FRA shall notify the signatories as to the course of action it will pursue.

F. Resolution of Public Objections

At any time during implementation of the measures stipulated in this Amended MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this Amended MOA, that signatory party shall immediately notify the other signatory parties in writing of the objection. FRA shall consult with the objecting party and with the other signatories for no more than thirty (30) days. FRA will take all comments from the other signatory parties into account. Within fifteen (15) days following closure of the consultation period, FRA shall render a decision regarding the objection and notify all parties of this decision in writing, including a copy of the response to the objecting party. FRA's decision regarding resolution of the objection will be final. Following issuance of its final decision, FRA may authorize the action subject to the objection to proceed in accordance with the terms of that decision.

G. Notice to Proceed

Upon completion of reviews without objection, or with resolution of objections under Stipulation V.C or V.F of this Amended MOA, the Authority will issue a notice to proceed in areas where adverse effects on historic properties have been addressed through this Amended MOA and supporting documentation.

H. Duration

If FRA determines that construction of the Undertaking has not been initiated within ten (10) years following execution of this Amended MOA, the signatories shall consult to reconsider its terms. Reconsideration may include continuation of the MOA as amended, further amendment, or termination.

This Amended MOA will be in effect through the Authority's implementation of the Undertaking and will terminate and have no further force or effect when FRA, in consultation with the other signatories, determines that the terms of this Amended MOA have been fulfilled in a satisfactory manner. FRA shall provide the other signatories with written notice of its determination and of termination of this Amended MOA.

I. Reporting

Electronic submittals are acceptable to expedite reviews.

1. Annual Report

An annual report (Report) shall be prepared by the Authority, in consultation with FRA and STB, documenting the implementation of this Amended MOA. The reporting period

shall begin on the date the Notice to Proceed is given to the contractor, and shall end for that reporting year 365 days after that date. Annual reporting will be required so long as this Amended MOA is in effect.

The Report shall include, at a minimum:

- List of all studies, reports, actions, evaluations, or monitoring reviewed or generated under the Stipulations of this Amended MOA.
- Record of all consultation and outreach efforts related to the implementation of this Amended MOA.
- Record of all efforts to identify and/or evaluate potential historic properties, monitoring efforts, archaeological management assessments or research designs, and treatment of historic properties.
- Any recommendations to further amend the MOA or improve communications among the parties.

The Authority shall submit the Report to FRA and STB, and after review by FRA and STB, the report will be provided to the SHPO, the signatories and the consulting parties, and the Authority shall ensure that the Report is made available to the public, upon request. At the request of the SHPO or the signatories and consulting parties, the Authority, in consultation with FRA, shall supplement this process through meeting(s) to address comments and/or questions.

The Authority shall submit an annual report to the FRA, the STB, the SHPO, and the ACHP no later than three (3) months following the end of the State fiscal year until all treatment is completed. There will be a thirty-day (30-day) period to review and comment on the report. The Annual Report will be finalized after the close of the thirty-day (30-day) comment period.

The Authority shall provide that the report herein prescribed is available for public inspection. The report will be sent to signatories and consulting parties of this Agreement, including Native American tribes, and a copy made available to members of the public for comment, upon request.

2. Monthly Progress Reports

Monthly progress reports documenting the implementation of the ATP and BETP will be prepared by the implementing contractor and submitted to the cultural resources point of contact at the Authority, FRA, and STB. Upon request, the monthly report will be provided to the SHPO and consulting parties to this Amended MOA. The progress report may be submitted in digital form and will at a minimum include the following:

- Name of project segment.
- Reference to the specific treatment(s) and historic properties being treated.
- Date, person, professional area of qualification, and entity/firm preparing and submitting the report.
- Activities conducted since the previous progress report, including the status of any field work, analysis, or document preparation. Report of inadvertent discoveries or effects, and the result of any response activities implemented.

- Activities planned for the upcoming month.
- Known issues affecting the implementation of the ATP, BETP, or project schedule.
- Potential issues that could affect the implementation of the ATP, BETP, or project schedule.

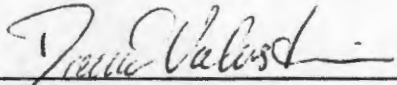
VI. EFFECTIVE DATE AND EXECUTION

This Amended MOA will take effect on the date that it has been executed by the Authority, FRA, STB, and the SHPO.

Execution of this Amended MOA by FRA, STB, and the Authority, its filing with the ACHP in accordance with 36 CFR 800.6(b)(1)(i), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR 800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 106 of the National Historic Preservation Act (NHPA), and shall further evidence that FRA, STB, and the Authority have afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that FRA, STB, and the Authority have taken into account the effects of the Undertaking on historic properties.

SIGNATORIES

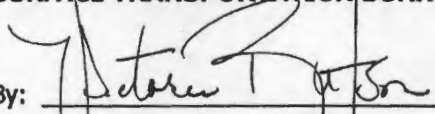
FEDERAL RAILROAD ADMINISTRATION

By:  Date: June 10, 2013

Name: David Valenstein

Title: Chief, Environment & Systems Planning Division

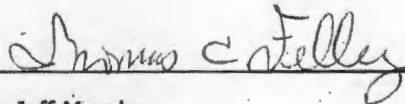
SURFACE TRANSPORTATION BOARD

By:  Date: June 10, 2013

Name: Victoria Rutson

Title: Director, Office of Environmental Analysis

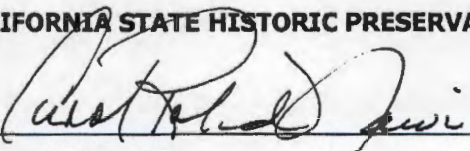
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

By:  Date: 6/11/13

For Name: Jeff Morales

Title: Chief Executive Officer

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By:  Date: 6-11-13

Name: Carol Roland-Nawl, Ph.D.

Title: California State Historic Preservation Officer

CONCURRING PARTIES

CALIFORNIA VALLEY MIWOK TRIBE

By: _____ Date: _____

Name:

Title:

COLD SPRINGS RANCHERIA OF MONO INDIANS

By: _____ Date: _____

Name:

Title:

NORTH FORK RANCHERIA OF MONO INDIANS

By: _____ Date: _____

Name:

Title:

SANTA ROSA RANCHERIA TACHI TRIBE

By: _____ Date: _____

Name:

Title:

NORTH FORK MONO TRIBE

By: _____ Date: _____

Name:

Title:

CHOWCHILLA TRIBE OF YOKUTS

By: _____ Date: _____

Name:

Title:

CITY OF MADERA

By: _____ Date: _____

Name:

Title:

CITY OF FRESNO

By: _____ Date: _____

Name:

Title:

COUNTY OF FRESNO

By: _____ Date: _____

Name:

Title: