

PREFACE

This document was not contained in Volume 1 of the Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS), but it appeared on the California High-Speed Rail Authority (Authority) website as the “Guide to Reviewing.” It is included here as the Preface to the Final EIR/EIS with the addition of an explanation of changes to the alternatives and analysis following publication of the Draft EIR/EIS.

What is this Document?

The Authority proposes to construct, operate, and maintain an electric-powered high-speed rail (HSR) system in California. When completed, the nearly 800-mile HSR system would provide new passenger rail service to California’s major metropolitan areas and through the counties that are home to more than 90 percent of the state’s population. In keeping with the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century (California Streets and Highways Code Section 2704 et seq.), the Bakersfield to Palmdale Project Section (B-P) would serve to connect the Fresno to Bakersfield Project Section to the north and the Palmdale to Burbank Project Section to the south.

Four Build Alternatives, two design options, and a No Project Alternative are analyzed in this joint EIR/EIS, which was developed in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Pursuant to 23 U.S. Code Section 327, under the NEPA Assignment Memorandum of Understanding between the Federal Railroad Administration (FRA) and the State of California, effective July 23, 2019, the Authority is the project sponsor and the lead federal agency for compliance with NEPA and other federal laws for the California HSR system, including the Bakersfield to Palmdale Project Section. The Authority is also the state lead agency under CEQA.

The Council on Environmental Quality provides for NEPA decision making through a phased process (Code of Federal Regulations Title 40, Part 1502.20).¹ This process is referred to as tiered decision making. This phased process supports a broad-level programmatic decision using a Tier 1 EIS; this Tier 1 process is followed by more specific decisions at Tier 2, with one or more Tier 2 EISs or project EISs. CEQA (Public Resources Code 21000 et seq.) also encourages tiering and provides for a Tier 1 and Tier 2 EIR.

The Authority and the FRA prepared the *2005 Final Program EIR/EIS for the Proposed California High-Speed Train System*, which was a Tier 1 analysis of the general effects of implementing the HSR system across two-thirds of the state. The *2008 San Francisco Bay Area to Central Valley High-Speed Train (HST) Final Program EIR/EIS* and the Authority’s *2012 Bay Area to Central Valley HST Partially Revised Final Program EIR* were also Tier 1, programmatic documents, focusing on the Bay Area to Central Valley region. These Tier 1 EIR/EIS documents provided the Authority and the FRA with the environmental analysis necessary to evaluate the overall HSR system and make broad decisions about general HSR alignments and station locations for further study in the Tier 2 EIR/EISs.

The Authority has prepared this Final EIR/EIS for the Bakersfield to Palmdale Project Section of the California HSR System as the next step in the environmental review process. This Final EIR/EIS is a Tier 2 environmental document that builds on the earlier program EIR/EISs and decisions while providing more site-specific and detailed analysis to support decisions for the HSR project in the geographic area from Bakersfield to Palmdale. Because of the highly technical and complex nature of the proposed Bakersfield to Palmdale Project Section, this Final EIR/EIS contains more information than is mandated by either federal or state statutory and regulatory requirements.

¹ The Council on Environmental Quality (CEQ) issued new regulations, effective September 14, 2020, updating the NEPA implementing procedures at 40 CFR 1500-1508. However, because this project initiated the NEPA process before September 14, 2020, it is not subject to the new regulations. The Authority is relying on the regulations as they existed prior to September 14, 2020. Therefore, all citations to CEQ regulations in this environmental document refer to the 1978 regulations, pursuant to 40 CFR 1506.13 (2020) and the preamble at 85 Fed. Reg. 43340.

The Bakersfield to Palmdale Project Section Final EIR/EIS includes:

- A detailed description of the project alternatives and design options and their potential benefits and impacts
- Environmental analysis to assist decision makers in selecting the project to be built
- Feasible avoidance and minimization measures and mitigation for potential adverse impacts
- Discussion of potential cumulative impacts as part of the environmental review process

The Authority widely circulated the Notice of Availability of the Draft EIR/EIS to affected local jurisdictions, state and federal agencies, tribes, community organizations, other interest groups, and interested individuals. The document was available to the public on February 28, 2020, on the Authority's website for an original 45-day public comment period. The document was also available at Authority offices and public libraries until the COVID-19 pandemic resulted in closure of these facilities in mid-March 2020. The Authority extended the public comment period by 15 days, resulting in a 60-day public comment period that closed on April 28, 2020. The Authority held a virtual public hearing on April 23, 2020, to receive oral testimony on the HSR project and the Draft EIR/EIS. The traditional in-person format of the public hearing was changed to a virtual public hearing held online and via telephone to comply with the Governor's directives and to protect public health during the COVID-19 pandemic.

Following the Authority's publication of the Draft EIR/EIS in February 2020, the Authority learned that the California Fish & Game Commission advanced the Southern California and Central Coast mountain lion (*Puma concolor*) populations to candidacy for listing under the California Endangered Species Act.² The Authority also learned that the U.S. Fish & Wildlife Service (USFWS) determined that listing the monarch butterfly (*Danaus plexippus*) under the Endangered Species Act is warranted, but that listing is precluded by other priorities; therefore, the monarch butterfly is now a candidate species under the Endangered Species Act.³ These actions by the California Fish & Game Commission and the U.S. Fish & Wildlife Service made the mountain lion and the monarch butterfly subject to the definition of special-status species used by the Authority for analysis. Therefore, in February 2021, the Authority issued a limited revision to its previously published Draft EIR/EIS entitled "*Bakersfield to Palmdale Project Section Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement*" (referred to below as the "Revised Draft EIR/Supplemental Draft EIS"). In addition to providing new information about the mountain lion and monarch butterfly, the Revised Draft EIR/Supplemental Draft EIS also identified two new mitigation measures to address impacts to wildlife resulting from lighting during construction and during project operation.

The Authority widely circulated the Notice of Availability of the Revised Draft EIR/Supplemental Draft EIS to affected local jurisdictions, state and federal agencies, tribes, community organizations, other interest groups, and interested individuals. The document was available to the public for review on the Authority's website from February 26, 2021, through April 12, 2021. The document was also available at Authority offices and public libraries to the extent those facilities were open due to the COVID-19 pandemic. No public hearings were held.

The Final EIR/EIS addresses the comments received during the public comment periods for the Draft EIR/EIS and the Revised Draft EIR/Supplemental Draft EIS. Throughout the Final EIR/EIS document, substantive changes in the text since publication of the draft document are indicated with a vertical line in the margin; minor editorial changes and clarifications are not identified. In addition, substantive changes are summarized at the beginning of each chapter and resource topic section of Chapter 3.

² California Department of Fish & Wildlife. 2020. Keep Me Wild: Mountain Lion. Website: <https://wildlife.ca.gov/keep-me-wild/lion>.

³ United States Fish & Wildlife Service. 2020. Assessing the status of the monarch butterfly. Website: <https://www.fws.gov/savethemonarch/ssa.html>.

How Do I Use this Document?

The purpose of environmental documents prepared under CEQA and NEPA is to disclose information to decision makers and the public. Although the science and analysis that supports the Bakersfield to Palmdale Project Section Final EIR/EIS is complex, it is intended for the general public. Every attempt has been made to limit the use of technical terms and acronyms. Where this cannot be avoided, the terms and acronyms are defined the first time they are used in each chapter, and a list of acronyms and abbreviations is provided in Chapter 15 of the Final EIR/EIS. This Bakersfield to Palmdale Project Section Final EIR/EIS has been prepared in accordance with Section 508 of the Rehabilitation Act of 1973, as amended, and the Web Content Accessibility Guidelines, as required under Section 11546.7 of the California Government Code, and can be found on the Authority's website (www.hsr.ca.gov).

Volume 1 of this Final EIR/EIS has 15 chapters and a Summary, which is available in English and Spanish. Volume 2 contains technical appendices. Volume 3 provides design plans and other relevant engineering drawings. Volume 4 provides the comments received on the Draft EIR/EIS, and the Revised Draft EIR/Supplemental Draft EIS as well as the responses to the comments.

For a reader with short amount of time to review this document, the **Summary** is the best place to start. It provides an overview of all of the substantive chapters in this document and includes a table listing the potential environmental impacts for each environmental resource topic. If the reader begins here but wants more information, the Summary directs the reader where to get details elsewhere in the document.

Below is a list and short summary of the chapters of **Volume 1, Report**, of the Final EIR/EIS.

- **Chapter 1, Project Purpose, Need, and Objectives**, explains why the project is proposed and provides a history of the planning process.
- **Chapter 2, Alternatives**, describes the proposed alternatives and design options, station locations, and maintenance facilities, as well as the No Project Alternative used for purposes of comparison. It contains illustrations and maps and provides a review of construction activities. Chapter 2 also identifies the Authority's Preferred Alternative, which also serves as the proposed project for CEQA.

The first two chapters help the reader understand what is being analyzed in the remainder of the document.

- **Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures**, is where the reader can find information about the existing transportation, environmental, and social conditions in the Bakersfield to Palmdale region. This chapter provides the findings of the analysis of potential environmental impacts, along with methods to reduce these impacts (called mitigation measures). Chapter 3 is divided into subsections discussing the following environmental resource topics:
 - Transportation
 - Air Quality and Global Climate Change
 - Noise and Vibration
 - Electromagnetic Interference and Electromagnetic Fields
 - Public Utilities and Energy
 - Biological and Aquatic Resources
 - Hydrology and Water Resources
 - Geology, Soils, Seismicity, and Paleontological Resources
 - Hazardous Materials and Wastes
 - Safety and Security
 - Socioeconomics and Communities
 - Station Planning, Land Use, and Development
 - Agricultural Farmland and Forest Land
 - Parks, Recreation, and Open Space

- Aesthetics and Visual Quality
 - Cultural Resources
 - Regional Growth
 - Cumulative Impacts
- **Chapter 4, Final Section 4(f)/6(f) Evaluations**, summarizes impacts to parks, wildlife refuges, and historic properties in accordance with Section 4(f) of the Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act.
 - **Chapter 5, Environmental Justice**, discusses whether the proposed alternatives would cause disproportionate impacts on low-income and minority communities. It also identifies mitigation to reduce those impacts, where appropriate.
 - **Chapter 6, Project Costs and Operations**, summarizes the estimated capital, operations, and maintenance costs for each alternative and design option, including funding and financial risk.
 - **Chapter 7, Other CEQA/NEPA Considerations**, summarizes the project's significant adverse environmental effects that cannot be avoided if the project is implemented, the project's benefits, and the significant irreversible environmental changes that would occur as a result of project implementation.
 - **Chapter 8, Preferred Alternative and Station Sites**, identifies the Preferred Alternative for the Bakersfield to Palmdale Project Section and the basis for its identification.
 - **Chapter 9, Public and Agency Involvement**, contains summaries of coordination and outreach activities with agencies and the general public.
 - **Chapter 10, EIR/EIS Distribution**, identifies the public agencies, tribes, and organizations that were informed of, and locations to review, this Final EIR/EIS.
 - **Chapter 11, List of Preparers**, provides the names and responsibilities of the authors of this Final EIR/EIS.
 - **Chapter 12, References**, lists the references and contacts used in writing this Final EIR/EIS.
 - **Chapter 13, Glossary of Terms**, provides a definition of certain terms used in this Final EIR/EIS.
 - **Chapter 14, Index**, provides a tool to cross-reference major topics addressed in this Final EIR/EIS.
 - **Chapter 15, Acronyms and Abbreviations**, defines the acronyms and abbreviations used in this Final EIR/EIS.

Volume 2, Technical Appendices, provides additional analysis to support the discussion in Volume 1. Technical appendices are primarily related to the affected environment and environmental consequences analyses. These appendices are numbered to match their corresponding chapter or section in this Project EIR/EIS (e.g., Appendix 3.7-A is the first appendix for Section 3.7, Biological and Aquatic Resources). These documents are also available on the Authority's website and at locations identified in Chapter 10, EIR/EIS Distribution.

Volume 3, Alignments and Other Plans, presents the design drawings, including trackway and roadway crossing design. These documents are also available on the Authority's website and at locations identified in Chapter 10, EIR/EIS Distribution.

Volume 4, Comments on the Draft EIR/EIS and Responses to Comments, provides a list of all commenters on the Draft EIR/EIS and Revised Draft EIR/Supplemental Draft EIS, reproductions of the original written comments, and responses to the comments. In addition, this volume provides the Authority's Standard Responses that address the most frequently raised issues. Standard responses are provided in Chapter 17 (English).

The **Technical Reports** provide more detailed technical analyses and data on some of the environmental resources evaluated in Chapter 3. Technical reports are not part of the Final EIR/EIS but are available upon request. For information on how to access and review technical reports, please refer to the Authority’s website (www.hsr.ca.gov) or call (866) 300-3044.

What Has Changed?

Since the close of the public comment period on the Draft EIR/EIS on April 28, 2020, the Authority has reviewed the public comments received. The Authority has continued to consult with local jurisdictions and property owners about the alignment alternatives and to work closely with regulatory agencies with jurisdiction over some components of the project. These consultations have resulted in project refinements, minor changes to the impacts analysis, and refinement of mitigation measures. The following is a summary of these changes.

Summary of Changes

Design Revisions to Address Public Review Comments

During the public review period for the Draft EIR/EIS, comments on the project were submitted by agencies, stakeholders, and the general public, many of which requested modifications to the project design. In order to be responsive to these comments on the Draft EIR/EIS, the Authority has addressed many of these requests by incorporating revisions into the project design. These revisions were determined to be consistent with the project design criteria, would represent a design improvement, and would reduce or have no change to environmental impacts and/or cost.

Kern Council of Governments/Greater Bakersfield Separation of Grade District

In response to the Kern Council of Governments and the Greater Bakersfield Separation of Grade District, the HSR alignment profile was lowered in the area of Morning Drive (Weedpatch Highway/State Route [SR] 184) in the community of Edison, thereby shortening the HSR viaduct structure and realigning Edison Highway in the vicinity of Morning Drive. In addition to reducing the project footprint, this modification also provides a design that is preferred by stakeholders, has a reduced construction cost, and avoids a sensitive AT&T communication facility near the proposed HSR alignment.

California Department of Transportation District 6

The relocation of SR 58 in the Marcel area was revised in response to input from California Department of Transportation District 6 to address the minimum desirable slope ratio and to allow for rock slope protection for cross-drainage. In the Marcel area, the HSR alignment crosses over SR 58 from north of the highway to south of the highway, and then back to the north side of SR 58. At the first crossing from north to south, the footprint was revised to provide the area needed to accommodate the straddle bent for the HSR viaduct over SR 58. In response to a comment from California Department of Transportation District 6 on the Draft EIR/EIS, a straddle bent was added to the design of the HSR viaduct crossing back over SR 58 from the south side to the north side.

City of Tehachapi

Several modifications to the design were made in response to comments from the City of Tehachapi on the Draft EIR/EIS. These included the addition of an access road around the tunnel portal just northeast of the Adventist Health Tehachapi Valley facility, a revised tunnel portal grading in the same general area, and shifting the Challenger Drive traction power substation site to a different location north of the alignment. The shifting of the traction power substation site also shifted the location of the access road and the electrical interconnect needed at the site.

The City of Tehachapi also requested that the profile of the HSR alignment within the Tehachapi Valley be lowered to reduce the visual impact of the alignment in the area. This adjustment resulted in an overall footprint reduction due to the lower profile of the HSR alignment from near the south portal of Tunnel 7, north of the City of Tehachapi, extending through Tehachapi and rejoining the original profile at the southern portal of Tunnel 8. The lowering of the profile also

resulted in adjustments of other elements of the design. The maintenance of infrastructure siding facility site in Tehachapi, near the Tehachapi Willow Springs Road crossing location, was shifted from the west side of the alignment to the east side of the alignment. Also as a direct result of the lowered profile, two existing roadways that were intended to pass under the HSR alignment on a viaduct structure (Highline Road and Tehachapi Willow Springs Road) are now proposed to cross over the HSR alignment. Additionally, the realignment of Valley Boulevard was needed to tie into Steuber Road, maintaining the existing traffic circulation patterns.

The City of Tehachapi also requested the addition of a bridge to allow connectivity from Challenger Drive/Dennison Road to the east side of the HSR alignment, where a future development is planned. Therefore, the associated revisions to access roads were also made, including the adjustment of the access road where it ties into Voyager Drive in north Tehachapi, connection of the HSR access road to Challenger Drive in Tehachapi, and provision of an access road from the relocated paralleling station to Tehachapi Willow Springs Road. Each of these revisions slightly increases the project footprint in that area compared to what was analyzed in the Draft EIR/EIS.

CalPortland Cement Company

In response to a comment on the Draft EIR/EIS from CalPortland Cement Company indicating that the north portal of Tunnel 9 (located immediately south of the Pacific Crest Trail (PCT) crossing and Oak Creek Road) was within the potential flyrock zone of its active mining operations, the project design for Alternatives 1, 2, and 5 was revised to provide for construction of a cover extending 1,700 feet from the northerly terminus of Tunnel 9 to protect the HSR infrastructure from the potential for damage from flyrock.

U.S. Department of the Interior, Bureau of Land Management

In one of its comments on the Draft EIR/EIS, the Bureau of Land Management (BLM) expressed concern regarding the proposed design that would require PCT users (including equestrians) to cross under the HSR viaduct in an 80-foot long, 15x15-foot box culvert. In response to this comment, the Authority developed a revised design of the HSR crossing of the PCT. In the area where the HSR alignment crosses the PCT, the alignment of Tehachapi Willow Springs Road was shifted to the west of the HSR alignment under Alternatives 1, 2, and 5. This shift in the alignment of Tehachapi Willow Springs Road eliminated a complex crossing of the HSR alignment over Tehachapi Willow Springs Road, but resulted in a direct impact to the existing PCT in this area as well as a minor increase to the previously defined footprint. Mitigation Measure PCT-MM#1, described in Section 3.15, Parks, Recreation, and Open Space, of the EIR/EIS provides for replacement of the impacted portion of the PCT on a new alignment. This will eliminate the need for PCT users to cross Tehachapi Willow Springs Road at grade as they do under existing conditions, thus improving safety for trail users. In addition, with the new design, PCT users would now cross under the HSR viaduct (and the new Tehachapi Willow Springs Road bridge) in an open crossing adjacent to the creek with over 57 feet of vertical clearance, which would improve the experience for the trail users as they cross under the HSR viaduct. The design revisions at this location also eliminated project impacts to a PCT parking area along Oak Creek Road (including removal of an oak tree).

City of Lancaster

In response to comments on the Draft EIR/EIS from the City of Lancaster, some modifications were made to roadway crossings within the city limits. As described in Chapter 2 of the Draft EIR/EIS, W Lancaster Boulevard was proposed to be closed between the intersection of Sierra Highway and the Union Pacific Railroad (UPRR) tracks, and the HSR alignment would be located between Sierra Highway and the UPRR alignment. Further, Milling Street was proposed to be connected across the HSR and UPRR tracks by the construction of a new roadway overpass spanning Beech Avenue, Sierra Highway, the HSR alignment, the Metrolink and UPRR tracks, and Yucca Avenue. However, in response to comments on the Draft EIR/EIS by the City of Lancaster, the Authority has revised the project design to retain the connectivity of Lancaster Boulevard as an underpass across the rail corridor. With the connection across the rail corridor

maintained at Lancaster Boulevard, the connection of Milling Street across the HSR alignment was removed from the project design.

Additionally, W Avenue I had been proposed in the Draft EIR/EIS to be grade-separated with an overpass spanning Sierra Highway, the HSR alignment, and the UPRR alignment, and further modifications made to retain access between W Avenue I and Sierra Highway via a signalized intersection. Per the City of Lancaster's request, the design of the W Avenue I crossing has been modified to become an underpass rather than an overpass. As part of the design modifications at W Avenue I, the footprint at the underpass has been reduced in order to avoid a low-income housing development in the immediate vicinity.

Also, in response to comments from the City of Lancaster, modifications were made to the design at the W Avenue H/7th Street W intersection to allow for the relocation of an existing driveway to the parking lot at the northeast corner of that intersection.

City of Palmdale

In response to comments on the Draft EIR/EIS from the City of Palmdale, the Authority consulted with the City of Palmdale and modified the proposed grade separation at Palmdale Boulevard to be an undercrossing, rather than an overcrossing as was identified in the Draft EIR/EIS. The reconfiguration of the grade separation entails adjusting the profile of Palmdale Boulevard, Sierra Highway, and the UPRR and Metrolink track corridor, which in turn required modifications to the project footprint. For reprofiled portions of Sierra Highway to conform with existing ground levels, the project footprint was expanded to accommodate a portion of E Avenue Q-7, north of Palmdale Boulevard, and a portion of Sierra Highway south of Avenue Q-10 E. In addition, the reconfiguration of the Palmdale Boulevard grade separation would also result in reduction of permanent footprint east of Sierra Highway. The original project footprint included surface parking lots between Sierra Highway and 10th Street. The reconfigured project design no longer includes parking east of Sierra Highway, resulting in reduction of the project footprint at this location, but results in the need to relocate 171 parking stalls and 6 Americans with Disabilities Act-compliant parking stalls that were originally planned along East Palmdale Boulevard, between Sierra Highway and 10th Place East. These parking stalls would be replaced by adding spaces to multiple surface lots along 5th Street E, west of HSR, Metrolink, and UPRR tracks.

Los Angeles Department of Water and Power

Footprint adjustments were also made to provide additional room for the relocation of and perpendicular crossings of high-voltage power lines. These design changes were made to address comments on the Draft EIR/EIS from the Los Angeles Department of Water and Power related to the safety and protection of critical facilities and the provision of sufficient rights-of-way for various activities.

California Department of Fish and Wildlife

In response to general comments on the Draft EIR/EIS to maintain hydrological function upstream and downstream of the proposed alignment, the Authority has incorporated a design improvement involving the installation of rock slope protection at drainage outlets and would size the on-site drainage basins to address potential downstream effects. Although this refinement resulted in an increase in needed footprint at the drainage outlet areas, the addition of rock slope protection helps to attenuate downstream hydraulic impacts identified in the Draft EIR/EIS. Similarly, refinements to the typical cross-section were made to allow for drainage ditches and maintenance access. These refinements also serve as a design improvement to attenuate downstream hydraulic impacts. The increase in footprint acreage associated with the addition of rock slope protection throughout the alignment is approximately 160 acres.

Multiple Local Jurisdictions—Local Design Standards

The Authority has also committed to meeting local jurisdiction design standards to the greatest extent feasible. Therefore, revisions to the project design have been made for consistency with local government requirements and HSR standards to address comments from agencies such as the Kern County Public Works Department. These revisions consist of realigning access roads,

adjustments to grade and profiles, addition of cul-de-sacs, radius adjustments, addition of hammerhead turnarounds (a T- or L-shaped dead-end street that allows sufficient space for emergency or access vehicles to make a U-turn) at viaduct locations for improved emergency and/or maintenance vehicle access, and Americans with Disabilities Act compliance improvements.

Design Revisions to Reduce Environmental Impacts

In addition to refinements to address public comments, other project design refinements were made throughout the project limits to remove portions of the footprint that were determined to be unnecessary to construct, operate, and maintain the HSR project. In doing so, the potential environmental impacts of the footprint evaluated in the Draft EIR/EIS and future right-of-way costs were reduced in many locations. For example, the elimination of the Caliente Creek traction power substation site, along with the associated elimination of 6 miles of interconnect run, resulted in a footprint reduction of roughly 72 acres.

Revisions and improvements to the traction power design were made to correlate with the HSR systemwide facility design and in some cases allow for an emergency/maintenance access road. These changes resulted in a net reduction of the project footprint required for traction power facilities, phase breaks, and electrical interconnects.

Other Minor Design Revisions

Other refinements to the alignment have been made since the release of the Draft EIR/EIS for various reasons, to further improve the safety of the design, or to reduce cost where possible.

To provide for safer operation of emergency and maintenance vehicles, the design of the access road where it ties into Voyager Road near the Adventist Health Tehachapi Valley facility was adjusted. Similarly, the footprint was revised throughout the alignment to allow for emergency/maintenance access road adjustments, hammerhead turnarounds, and grading limit adjustments, and also to provide additional room for the safe operation of maintenance vehicles.

Minor footprint modifications were made to accurately represent the permanent impact area of the removal of wind turbines. It should be noted that the removal of the wind turbines was identified as an impact in the Draft EIR/EIS. Four of the wind turbines were not within the original project footprint, but were identified for removal because they posed a safety hazard due to their adjacency to the HSR alignment. The footprint additions to account for the removal of these four wind turbines total approximately 0.25 acre.

Similarly, the footprint associated with Alternative 2 was modified to accommodate the revised Edison Highway roadway section in Bakersfield to be consistent with Alternatives 1, 3, and 5, as this is a location in which the HSR alignment is common to all B-P Build Alternatives.

Minor modifications to the footprint were also made to more accurately reflect the area needed for tunnel portal grading at some locations.

The footprint was also adjusted to pave existing dirt roads for emergency access in some areas, including Highgate Avenue just north of the community of Rosamond to prevent erosion due to flooding. This adjustment is a design improvement to allow for the safe operation of emergency and maintenance vehicles in various weather conditions and provide access to the entire alignment.

Selection of Preferred Maintenance Facility Location

Two maintenance facility site options, the Lancaster North site and the Avenue M site, were evaluated in the Draft EIR/EIS for the Bakersfield to Palmdale Section. The Lancaster North site was evaluated as both a maintenance of way facility and a combined light maintenance facility / maintenance of way facility, whereas the Avenue M site was evaluated only as a light maintenance facility. As part of the design refinements considered following publication of the Draft EIR/EIS, the Authority revised the design and expanded the project footprint of the Avenue M site to accommodate a combined light maintenance facility/maintenance of way facility. The

impacts of the combined light maintenance facility/maintenance of way facility at the Avenue M site have been evaluated in this Final EIR/EIS. Following the public comment period on the Draft EIR/EIS, the Authority staff evaluated the Lancaster North and Avenue M maintenance facility locations with regard to the Authority’s criteria for maintenance sites and determined that the Preferred Alternative should include a maintenance of way facility at Avenue M in the Cities of Lancaster and Palmdale. The reasons for the Avenue M site being chosen as the preferred maintenance of way facility location include: (1) the Authority’s requirement for maintenance facilities to have freight rail access for delivery of materials, (2) the southerly location of the maintenance of way facility at Avenue M rather than Lancaster North would improve connectivity to the Palmdale Station and HSR project sections to the south of Palmdale, and (3) the Avenue M footprint area is of sufficient size to accommodate a light maintenance facility in the future. Although the footprint at the Avenue M site has been expanded by approximately 17 acres to accommodate the potentially combined facility, the Avenue M site requires 177 acres of permanent footprint compared to the Lancaster North light maintenance facility/maintenance of way site, which would have required 212 acres of permanent footprint.

Summary of Environmental Analysis Changes

The Final EIR/EIS includes a number of revisions to the environmental analysis, which can be summarized as follows:

- Project revisions are described in Chapter 2 and considered as part of the impacts analysis in Chapter 3. Details about changes and impacts analysis can also be found in Appendix 3.1-B.
- Impact GSS #7a, Impacts to Mineral Resources during Construction, was added to clarify potential impacts on mineral resources due to implementation of the B-P Build Alternatives. A discussion was also added about specific mineral resource recovery sites/companies that construction of B-P Build Alternatives could affect, and a summary of the mineral resource impacts discussed was added to Section 3.9.9 CEQA Significance Conclusions.
- Impact calculations in tables in Sections 3.7, 3.8, 3.9, 3.10, 3.12, 3.13, and 3.14 were revised to reflect project refinements and in response to comments.
- Impact evaluation methods in Sections 3.7, 3.9, 3.12, and 3.13 and in Chapters 4 and 5 were clarified to address public comments on the Draft EIR/EIS.
- Minor text additions and clarifications were made to address public comments on the Draft EIR/EIS.
- Figures in Chapters 1, 2, and 4, and in Sections 3.2, 3.7, 3.9, 3.15, 3.16, and 3.17, were revised to depict the project design revisions made in response to public comments on the Draft EIR/EIS.
- Consistency analysis with local and regional plans, including the Palmdale Housing Element and Palmdale Transit Village Specific Plan, was updated in response to public comments on the Draft EIR/EIS.
- Refinements to the discussion of mitigation measures have been made in response to public comments on the Draft EIR/EIS.
- Revisions to Section 3.7 were made providing new information from the Revised Draft EIR/Supplemental Draft EIS about the mountain lion and monarch butterfly, as well as the two new mitigation measures to address impacts to wildlife resulting from lighting during construction and during project operation.

Evaluation of Need for CEQA Recirculation or NEPA Supplementation

Neither NEPA nor CEQA are intended to freeze the status of a project as of the time of circulation of a Draft EIR/EIS. Both environmental statutes accommodate the fact that projects may evolve and be refined in response to public input. Under NEPA, a supplemental Draft EIS is required only if the agency makes substantial changes in the proposed action that are relevant to environmental concerns, or there are significant new circumstances or new information relevant

to environmental concerns and bearing on the proposed action and its impacts (Code of Federal Regulations Title 40, Part 1502.9(c)). Under CEQA, recirculation of the Draft EIR is required only when “significant new information” is added to an EIR after public review, but before certification (CEQA Guidelines, §15088.5). New information added to an EIR is not “significant” unless “the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement” (CEQA Guidelines, §15088.5(a)).

The Authority has carefully considered whether any of the changes would necessitate either a recirculated Draft EIR or a supplement to the Draft EIS. The refinements described above make modifications to the B-P Build Alternatives, often in response to public review comments, to minimize environmental impacts or the necessary footprint area, to further improve the safety of the design, or to reduce cost where possible. These modifications refine the design features of the B-P Build Alternatives and Design Options evaluated in the Draft EIR/EIS, but they do not change the fundamental project description of the construction, operation, and maintenance of an electrified high-speed train between Bakersfield and Palmdale presented in Chapter 2 of the EIR/EIS. The refinements also do not change the horizontal alignment of any of the B-P Build Alternatives and Design Options, nor do they change the two stations in Bakersfield and Palmdale. The refinements do lower the profile of the track centerline near Morning Drive in the community of Edison and in the Tehachapi Valley, but these changes reduce visual impacts and were made in response to comments on the Draft EIR/EIS. The refinements also change the proposed Avenue M maintenance facility from a light maintenance facility, as described in the Draft EIR/EIS, to a maintenance-of-way facility with a potential option to add a light maintenance facility in the future. However, as discussed in Chapters 2 and 8 of this Final EIR/EIS, this provides benefits for the future maintenance of the HSR system and also reduces the footprint impacts associated with constructing a light maintenance facility at the Avenue M site and a maintenance-of-way facility at the Lancaster North site.

As discussed above, although some updates to impact data and calculations have been made in this Final EIR/EIS, the overall analysis, conclusions, and CEQA significance determinations have not changed from those presented in the Draft EIR/EIS. No new significant environmental impacts have been identified, and no substantial increase in the severity of an environmental impact already identified has resulted from the incorporation of the refinements into the project design. Therefore, the Authority has determined that recirculation of the Draft EIR or a supplement to the Draft EIS is not required.

What Happens Next?

Following issuance of this Final EIR/EIS, the Authority would consider whether to certify the Bakersfield to Palmdale Project Section Final EIR/EIS for compliance with CEQA and to approve the Preferred Alternative, along with CEQA findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting plan. If the Authority certifies the Final EIR/EIS and makes a decision to approve the B-P Preferred Alternative, it would file a Notice of Determination with the State Clearinghouse as required under CEQA. Pursuant to its responsibilities under NEPA as assigned by the FRA, the Authority would consider whether to issue a Record of Decision. The Record of Decision would describe the project and alternatives considered; describe the selected alternative; make environmental findings and determinations as may be required by the Endangered Species Act, Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act of 1966, and environmental justice pursuant to U.S. Executive Order 12898; and describe required mitigation measures. Separately, the FRA would make findings and determinations with regard to air quality conformity under the federal Clean Air Act.

Bakersfield to Palmdale Milestone Schedule

- **February 2020**—Public Release of Draft EIR/EIS
- **February 2021**—Public Release of Revised Draft EIR/Supplemental Draft EIS

- **June 2021**—Final EIR/EIS released
- **August 2021**—CEQA Notice of Determination and NEPA Record of Decision

The schedule for final design, construction, and operation would be refined as the project moves closer to the end of the environmental review and preliminary design phase.

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