

Preface

What Is This Document?

The California High-Speed Rail Authority (Authority) proposes to construct, operate, and maintain an electric-powered high-speed rail (HSR) system in California. When completed, the 800-mile HSR system will 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. The approximately 145-mile-long San Jose to Merced Project Section (Project Section) would provide the public with electric-powered HSR service that provides predictable and consistent travel times between major urban centers and connectivity to airports, mass transit systems, and the highway network stretching from Santa Clara County in the San Francisco Bay Area to the Central Valley. It would help connect the northern and southern portions of the statewide HSR system. The Project Section would provide HSR service between Diridon Station in downtown San Jose and a station in downtown Merced. The Project Section comprises three project extents:

- From Scott Boulevard in Santa Clara to Carlucci Road in Merced County, at the western terminus of the Central Valley Wye (the project evaluated in this document)
- The Central Valley Wye, which connects the east-west portion of HSR from the Bay Area to the Central Valley, beginning at Carlucci Road in Merced County, with the north-south portion from Merced to Fresno (evaluated in the 2020 *Merced to Fresno Section: Central Valley Wye, Final Supplemental Environmental Impact Report [EIR]/Environmental Impact Statement [EIS]* (Authority 2020))
- The northernmost portion of the Merced to Fresno Project Section, from the northern limit of the Central Valley Wye (Ranch Road) to the Merced Station (evaluated in the 2012 *Merced to Fresno Section Final EIR/EIS* [Authority and FRA 2012])

The portion of the Project Section analyzed in this *San Jose to Merced Project Section Final EIR/EIS* (Final EIR/EIS) is from Scott Boulevard, just north of San Jose Diridon Station, to Carlucci Road. This is referred to as the San Jose to Central Valley Wye Project Extent (project or project extent). It would extend approximately 90 miles, passing through Santa Clara, San Benito, and Merced Counties and in or near the cities of Santa Clara, San Jose, Morgan Hill, Gilroy, and Los Banos. Four project alternatives and the no project alternative are analyzed in this joint California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) document.

Pursuant to 23 United States Code (U.S.C.) 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 San Jose to Merced 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 (42 U.S.C. § 4321 et seq.; 40 Code of Federal

Sequence of Associated California HSR Tiered Environmental Documents

Tier 1/Program Documents

- Final Program EIR/EIS for the Proposed California High-Speed Train System (2005)
- San Francisco Bay Area to Central Valley High-Speed Train Final Program EIR/EIS (2008)
- Bay Area to Central Valley High-Speed Train Partially Revised Final Program EIR (2012)

Tier 2/Project Documents

- Merced to Fresno Section Final EIR/EIS (2012)
- Merced to Fresno Section: Central Valley Wye Final Supplemental EIR/EIS (2020)
- San Francisco to San Jose Section Draft EIR/EIS (2020)
- San Jose to Merced Project Section Final EIR/EIS (this document)

Regulations (C.F.R.) § 1502.20)¹ known as *tiering*. This phased process supports a broad-level programmatic decision using a first-tier EIS. The first-tier process is followed by more specific decisions at the second tier, with one or more second-tier EISs. The NEPA tiering process allows incremental decision making for large projects that would be too extensive and cumbersome to analyze in one traditional project EIS. CEQA (Public Resources Code § 21000 et seq.) also encourages tiering and provides for first-tier and second-tier EIRs.

The San Jose to Merced Project Section EIR/EIS is a second-tier EIR/EIS that tiers off of first-tier program EIR/EIS documents and provides project-level information for decision making on this portion of the HSR system. The Authority and the FRA prepared the 2005 *Final Program EIR/EIS for the Proposed California High-Speed Train System* (Authority and FRA 2005), which provided a first-tier analysis of the general effects of implementing the HSR system across two-thirds of the state. The 2008 *Bay Area to Central Valley High-Speed Train Final Program EIR/EIS* (Authority and FRA 2008) and the Authority's 2012 *Bay Area to Central Valley High-Speed Train Partially Revised Final Program EIR* (Authority 2012) were also first-tier programmatic documents, but they focused on the Bay Area to Central Valley region. These first-tier EIR/EIS documents provided the Authority and FRA with the environmental analyses necessary to evaluate the overall HSR system and make broad decisions about general HSR alignments and station locations for further study in the second-tier EIR/EISs. Between San Jose and Merced, the corridor advanced for Tier 2 study was the Pacheco Pass via Henry Miller Road from San Jose to the Central Valley. The station locations advanced for Tier 2 study were in San Jose and Gilroy with no station between Gilroy and Merced.

The San Jose to Merced Project Section EIR/EIS analyzes the environmental impacts and benefits of implementing the HSR in the more geographically limited area between San Jose Diridon Station and Carlucci Road and is based on more detailed project planning and engineering. The analysis therefore builds on the earlier decisions and program EIR/EISs and provides more site-specific and detailed analysis.

This Final EIR/EIS does the following:

- Describes four project alternatives and their potential impacts
- Provides environmental information to assist decision makers in selecting the project alternative to be built
- Identifies measures to avoid and minimize impacts and, when necessary, to compensate for adverse impacts
- Considers cumulative impacts as part of the environmental review process

The Authority widely circulated the Draft EIR/EIS to affected local jurisdictions, state and federal agencies, tribes, community organizations, other interest groups, and interested individuals. The document was also made available at Authority offices, public libraries, and county clerk offices (refer to Chapter 10, Distribution List, for a complete list of repository locations). The Draft EIR/EIS was made available to the public by the Authority in accordance with its responsibility as the federal lead agency for review and comment, as required, for a minimum of 45 days pursuant to CEQA and NEPA. During this period, the Authority hosted a public hearing and community open houses. The public hearing provided an opportunity for the public to submit verbal comments on the Draft EIR/EIS and the alternatives under consideration. Written comments were also accepted at the open houses and the hearing.

This document, the San Jose to Merced Project Section Final EIR/EIS, incorporates the whole of the Draft EIR/EIS. Volume 4 of this Final EIR/EIS includes the Authority's responses to all

¹ The Council on Environmental Quality (CEQ) issued new regulations, effective September 14, 2020, updating the NEPA implementing procedures at 40 C.F.R. Parts 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 C.F.R. Section 1506.13 (2020) and the preamble at 85 *Federal Register* 43340.

comments received during the public circulation of the Draft EIR/EIS and the Revised/Supplemental Draft EIR/EIS, while Volumes 1 and 2 have been revised to reflect changes and clarifications, including those based on comments received. These revisions are described in greater detail in the Final EIR/EIS Executive Summary.

The Authority is issuing this document in February 2022, prior to an anticipated meeting of the Authority's Board, further described below. The document will be available electronically on the Authority's website; the Authority will also distribute electronic copies to interested parties. The Authority will make copies of the document available for public review at the Authority's Sacramento and San Jose offices, and at various local library facilities during hours the facilities are open (open days/hours may be reduced for compliance with coronavirus public health and safety directives).

How Do I Use This Document?

The purpose of environmental documents prepared under NEPA and CEQA is to disclose information about a proposed project to decision makers and the public. While the science and analysis that supports this Final EIR/EIS are complex, this document 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. This San Jose to Merced 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.

Volume 1 of this Final EIR/EIS is organized into 15 chapters and an Executive Summary. Translated versions of the Executive Summary are available in Spanish, Mandarin, and Vietnamese. Volume 2 contains technical appendices. Throughout Volumes 1 and 2, to the extent practical and for the convenience of the reader, a vertical line in the left- and right-hand margins indicate areas where substantive edits to text, tables, or graphics were made between the Draft EIR/EIS and the Final EIR/EIS. 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. Volume 3 provides plans and other relevant engineering drawings and includes any changes since publication of the Draft EIR/EIS. Volume 4 is newly added and includes responses to comments received on the Draft EIR/EIS and the *San Jose to Merced Project Section Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement, Biological Resources Analysis* (Revised/Supplemental Draft EIR/EIS). For a reader with limited time to devote to this document, the Executive Summary is the place to start. It provides an overview of all of the substantive chapters in this document, includes a table listing the potential environmental impacts for each environmental resource topic, and summarizes the substantive changes in each section since publication of the Draft EIR/EIS. If the reader begins here but wants more information, the Executive Summary directs the reader to more detailed discussion elsewhere in the document. Below is a list of the chapters and a short summary of each.

Chapter 1, Project Purpose, Need, and Objectives, explains the project purpose and need for the San Jose to Merced Project Section, provides a history of the planning process, and describes the project's relationship to other plans, programs, and transportation projects.

Chapter 2, Alternatives, describes in detail the four project alternatives and the no project alternative that the Authority is considering in this Final EIR/EIS. It contains illustrations and maps and provides a review of construction activities. These 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 project area. 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 the following sections:

- Section 3.1, Introduction
- Section 3.2, Transportation*
- Section 3.3, Air Quality and Greenhouse Gases*
- Section 3.4, Noise and Vibration*
- Section 3.5, Electromagnetic Fields and Electromagnetic Interference
- Section 3.6, Public Utilities and Energy
- Section 3.7, Biological and Aquatic Resources*
- Section 3.8, Hydrology and Water Resources*
- Section 3.9, Geology, Soils, Seismicity, and Paleontological Resources*
- Section 3.10, Hazardous Materials and Wastes*
- Section 3.11, Safety and Security
- Section 3.12, Socioeconomics and Communities*
- Section 3.13, Station Planning, Land Use, and Development
- Section 3.14, Agricultural Farmland*
- Section 3.15, Parks, Recreation, and Open Space
- Section 3.16, Aesthetics and Visual Quality*
- Section 3.17, Cultural Resources*
- Section 3.18, Regional Growth
- Section 3.19, Cumulative Impacts

*separate technical report available

Chapter 4, Section 4(f)/6(f) Evaluation, provides the analysis to support the Authority's preliminary determinations to comply with the provisions of Section 4(f) of the Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Funds Act.

Chapter 5, Environmental Justice, discusses whether the project alternatives would have a disproportionately high and adverse effect on minority populations and/or low-income populations.

Chapter 6, Project Costs and Operations, summarizes the estimated costs for building, operating, and maintaining each of the project alternatives evaluated in this Final EIR/EIS.

Chapter 7, Other CEQA/NEPA Considerations, summarizes the unavoidable adverse effects under NEPA, the significant and unavoidable impacts under CEQA, the relationship between short-term uses of the environment and long-term productivity, and the significant irreversible or irretrievable commitments of resources that would result from the project alternatives.

Chapter 8, Preferred Alternative, describes the Preferred Alternative and the basis for identifying it.

Chapter 9, Public and Agency Involvement, describes the public and agency involvement efforts conducted for the preparation of this Final EIR/EIS.

Chapter 10, Distribution List, identifies the public agencies, tribes, and organizations that were informed of the availability of, and locations to review, this Final EIR/EIS.

Chapter 11, List of Preparers, provides the names and roles of the preparers of this Final EIR/EIS.

Chapter 12, References, lists the references used in writing this document.

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 in this Final EIR/EIS.

Chapter 15, Acronyms and Abbreviations, defines the acronyms and abbreviations used in this document.

Volume 2, Technical Appendices, provides additional details on the project alternatives; the Final EIR/EIS process; and resource-specific background information, data, and other evidence supporting the analyses. Technical appendices are primarily related to the affected environment and environmental consequences analyses. These appendices are numbered to match their corresponding section in Chapter 3, as well as Chapter 2, of this Final EIR/EIS (e.g., 3.7-A is the first appendix for Section 3.7, Biological and Aquatic Resources).

Volume 3, Preliminary Engineering for Project Design Record, presents the design drawings, including trackway and roadway crossing designs.

Volume 4, Responses to Comments on Draft Environmental Impact Report/Environmental Impact Statement, provides a list of all commenters on the Draft EIR/EIS and Revised/Supplemental Draft EIR/EIS, reproductions of the original written comments, and responses to the comments. The responses are organized into chapters based on commenter type. In addition, this volume provides the Authority's Standard Responses that address the most frequently raised issues. Translations of the Standard Responses are also available in Spanish, Mandarin, and Vietnamese.

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—with the exception of the technical reports for Air Quality and Greenhouse Gases and Noise and Vibration, which are included in Volume 2—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 (800) 455-8166.

Printed copies of the Executive Summary and Volume 1 of the Final EIR/EIS and/or electronic versions of the entire EIR/EIS (Volumes 1–4) are also available for review during business hours at the following locations (open days/hours may be reduced for compliance with coronavirus public health and safety directives):

- Authority's Northern California Regional Office: 100 Paseo de San Antonio, Suite 300, San Jose, CA 95113
- Authority's Headquarters: 770 L Street, Suite 620 MS-1, Sacramento, CA
- Central Park Library: 2635 Homestead Road, Santa Clara, CA 95051
- Dr. Martin Luther King, Jr. Library: 150 E. San Fernando Street, San Jose, CA 95112
- Gilroy Library: 350 W. 6th Street, Gilroy, CA 95020
- Los Banos Branch Library: 1312 7th Street, Los Banos, CA 93635
- Merced County Library: 2100 O Street, Merced, CA 95340
- Merced County Clerk: 2222 M Street, Merced, CA 95340
- Morgan Hill City Hall, Development Services Department, 17575 Peak Avenue, Morgan Hill, CA 95037
- Morgan Hill Library: 660 W. Main Ave, Morgan Hill, CA 95037
- San Benito County Recorder: 440 5th Street #206, Hollister, CA 95023

What Happens Next?

The Authority will consider certifying the Final EIR/EIS for compliance with CEQA and making a final decision on selecting the Preferred Alternative. If the Authority certifies the Final EIR/EIS and makes a decision on the Preferred Alternative, it will file a Notice of Determination with the State Clearinghouse. 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. Presidential 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.