

Bay Area to Central Valley
High-Speed Train

Revised FINAL Program Environmental Impact Report

Volume 1

August 2010



**Bay Area to Central Valley
High-Speed Train (HST)
Revised Final Program
Environmental Impact Report**

Volume 1

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Bay Area to Central Valley High-Speed Train Revised FINAL Program Environmental Impact Report

Pursuant to:

California Environmental Quality Act, P.R.C. 21000 et seq.;

State of California CEQA Guidelines, California Administrative Code, 15000 et seq.

**Prepared by the
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Date: August 16, 2010

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PREFACE

P.1.1 What Is This Document?

This document is a Revised Final Program Environmental Impact Report (EIR) for the Bay Area to Central Valley High-Speed Train (HST). The Revised Final Program EIR document was prepared to comply with the final judgment in the *Town of Atherton* litigation on the 2008 Bay Area to Central Valley High-Speed Train (HST) Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS). In that litigation, the Superior Court found that the May 2008 Final Program EIR certified by the California High Speed Rail Authority (Authority) did not fully comply with the California Environmental Quality Act (CEQA), and identified the following issues requiring additional work:

- **ADEQUACY OF PROJECT DESCRIPTION:** “The Court concludes that the description of the alignment of HSR tracks between San Jose and Gilroy was inadequate even for a programmatic EIR. The lack of specificity in turn results in an inadequate discussion of the impacts of the Pacheco alignment on surrounding businesses and residences which may be displaced, construction impacts on the Monterey Highway, and impacts on Union Pacific’s use of its right-of-way and spurs and consequently its freight operations.” (Ruling, p. 6.)
- **RECIRCULATION AFTER UNION PACIFIC RAILROAD ANNOUNCED ITS UNWILLINGNESS TO ALLOW USE OF ITS RIGHT-OF-WAY:** “[T]his Court concludes that various drawings, maps and photographs within the administrative record strongly indicate that [the Pacheco alignment is dependent upon the use of Union Pacific’s right-of-way.] The record further indicates that if the Union Pacific right-of-way is not available, there may not be sufficient space for the right-of-way needed for the HST without either impacting the Monterey Highway or without the takings of additional amounts of residential and commercial property. These are significant impacts which were sufficient to trigger recirculation of the FPEIR.” (Ruling, pp. 19-20.)
- **LAND USE IMPACTS ALONG SAN FRANCISCO PENINSULA:** “As discussed elsewhere in this Court’s ruling, Union Pacific has stated it is unwilling to allow its right-of-way to be used for the project. The need for the taking of additional property is a related issue that will be required to be analyzed in connection with further analysis of the impact of Union Pacific’s denial of use of its right-of-way.” (Ruling, pp. 15-16.)

The Court also held the Authority’s CEQA finding on vibration impacts was not supported by substantial evidence. (Ruling, p. 14.)

To comply with the court judgment, the Authority rescinded its certification of the May 2008 Final Program EIR and recirculated revised portions of the prior Program EIR in a document called Bay Area to Central Valley Revised Draft Program EIR Material (Revised Draft Program EIR) for 45 days. By the close of the 45-day public comment period, the Authority received more than 500 written letters and verbal statements at public hearings, totaling more than 3,750 individual comments.

This Revised Final Program EIR is a multi-volume document that includes the text of the Revised Draft Program EIR, with some textual modifications in response to comments; comments on the Revised Draft Program EIR; a list of persons, organizations and agencies commenting on the Revised Draft Program EIR; responses to the significant environmental points raised in the comments on the Revised Draft Program EIR; and the full text of the 2008 Final Program EIR, including volumes 1 and 2 (text and appendices) and volume 3 (responses to comments).

P.1.1 How Do I Use This Document?

The Revised Final Program EIR includes two distinct stages of the Authority's program EIR process for the Bay Area to Central Valley study area: (1) two volumes consist of the 2010 revised and recirculated portions of the May 2008 Final Program EIR and comments and responses thereupon; and (2) three volumes comprising the May 2008 Final Program EIR. The following identifies the components of each part of the Revised Final Program EIR.

REVISED FINAL PROGRAM EIR, VOLUME 1

Volume 1 of the Revised Final Program EIR is organized into ten (10) chapters that collectively address the issues identified by the Superior Court in the *Town of Atherton* litigation.

Chapter 1, Introduction and Summary: Describes the basis for recirculating portions of the May 2008 Final Program EIR; summarizes the revised material being recirculated; identifies the public comment period for the revised and recirculated material, the notices provided to the public, and how many comments were received; describes how the Revised Final Program EIR will be used by the Authority; describes the relationship of the program EIR to second-tier, project-level EIR work in progress.

Chapter 2, Revised Project Description and Revised Impact Analyses: San Jose to Gilroy: Provides a corrected project description for San Jose to Gilroy and a revised impacts analysis related to surrounding businesses and residences that may be displaced, construction impacts on Monterey Highway, impacts on black walnut trees along Monterey Highway, and a clarification on visual impacts.

Chapter 3, Union Pacific Railroad's Statements Refusing to Allow Use of its Rights-of-Way and the Potential for Needing Additional Property for the HST Alignment Alternatives: Addresses Union Pacific Railroad's (UPRR's) statements regarding its unwillingness to share its rights-of-way with HST tracks or facilities and how this position affects the prior EIR analysis of land use and property impacts for each alignment alternative.

Chapter 4, Impacts to Union Pacific Railroad Freight Operations: Discusses affect of HST proximity to UPRR freight operations and potential for secondary impacts.

Chapter 5, Costs and Operations: Provides corrections to cost and operations information to reflect the revised information in Chapter 2 for San Jose to Gilroy and in Chapter 3 for San Francisco to San Jose.

Chapter 6, High-Speed Train Network and Alignment Alternative Comparison: San Jose to Gilroy: Includes necessary changes to the summary tables in Chapter 7 of the May 2008 Final Program EIR to reflect corrected information and analysis in Chapter 2 for San Jose to Gilroy and in Chapter 3 for San Francisco to San Jose.

Chapter 7, Revised Draft Program EIR Material and Designation of a Preferred Network Alternative For Connecting the Bay Area to the Central Valley: Includes a synthesis of the information in Chapters 2-6 and concludes that the new and revised information does not change the commendation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as the Preferred Network Alternative.

Chapter 8, Unavoidable Adverse Environmental Impacts, San Jose to Gilroy: Discusses how revised materials affect the identification of unavoidable adverse impacts in this area.

Chapter 9, List of Preparers identifies the authors of the Revised Final Program EIR.

Chapter 10, Sources Used in Document Preparation identifies primary sources of information used in preparation of the Revised Draft Program EIR.

REVISED FINAL PROGRAM EIR, VOLUME 2

Volume 2 of the Revised Final Program EIR includes copies of all written comments received during the public review period for the Revised Draft Program EIR (March 11, 2010 to April 26, 2010) and transcripts of all verbal comments received during 2 public hearings in San Jose on April 7, 2010. Each comment is assigned a unique comment number. Following each comment, whether a written letter, EIR comment card, e-mail, or transcript of a verbal comment, a response is provided, referenced by comment number. Where appropriate, the response indicates where to find more information on the topic in a standard response and/or in the Final Revised Program EIR.

2008 FINAL PROGRAM EIR

The Revised Final Program EIR also includes the three volumes of the 2008 Final Program EIR.

The 2008 Final Program EIR Volume 1 includes a summary and the entire text of: the project purpose and need and objectives (ch. 1); a description of the alternatives (ch. 2); the environmental setting, impacts analysis, and discussion of mitigation strategies (ch. 3); project costs and operations (ch. 4); economic growth and growth-related impacts (ch. 5); HST station area development (ch. 6); a comparison of the HST network and alignment alternatives (ch. 7); identification of the preferred alternative (ch. 8); unavoidable adverse impacts (ch. 9); public and agency involvement (ch. 10); outreach (ch. 11); list of preparers (ch. 12); distribution (ch. 13); sources used in document preparation (ch. 14); a glossary (ch. 15); index (ch. 16), and acronyms (ch. 17).

The 2008 Final Program EIR Volume 2 includes all appendices.

The 2008 Final Program EIR Volume 3 includes all comments received on the July 2007 Draft Program EIR and responses to those comments.

P.1.2 What Has Changed Since the Revised Draft Program EIR?

The following updates, additions, and revisions have been made since the Revised Draft Program EIR was circulated in March and April 2010 and have been included in this Revised Final Program EIR, Volume 1.

Change	Location
Updated text to refer to Revised Final Program EIR	• All chapters
Updated text regarding the public comment process on the Revised Draft Program EIR and preparation of Revised Final Program EIR.	• Chapter 1
Added reference to San Martin	• Chapter 2, section 2.2
Added text to discussion of revised traffic analysis, San Jose to Gilroy	• Chapter 2, section 2.3
Revised text discussing mitigation strategies related to UPRR freight operations	• Chapter 4, section 4.1.4
Clarified proximity of potential Gilroy station to Santa Cruz County	• Chapter 6
Updated discussion of preferred alternative to incorporate comments received during public comment period for Revised Draft Program EIR	• Chapter 7
Added sentence on UPRR Intercity Passenger Service Rights	• Chapter 3, section 3.2.2

P.1.3 What Happens Next?

At the completion of this revised program environmental review process, the Authority will consider whether to certify the Revised Final Program EIR. If the Authority certifies the Revised Final Program EIR as complying with CEQA, it will then consider whether to take the following actions:

- Select a network alternative, alignment alternatives, and station location options for further study in second-tier, project-level EIRs; and
- Adopt CEQA findings of fact; and mitigation monitoring and reporting program. This may include a statement of overriding considerations.

Assuming the Authority decides to go forward with development of the HST system in the Bay Area to Central Valley study area, the Authority would focus future project analysis on the network alternative, alignment alternatives, and station options selected through this program environmental review process. Site-specific location and design alternatives for the alignment and station options selected at the program-level, including impact avoidance and minimization alternatives and strategies, would be further investigated and considered during second-tier, project-level environmental review.

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CHAPTER 1
INTRODUCTION AND SUMMARY

1 INTRODUCTION AND SUMMARY

The California High-Speed Rail Authority (Authority) has circulated a Revised Draft Program Environmental Impact Report Material (Revised Draft Program EIR) to comply with the final judgment in the *Town of Atherton* litigation on the 2008 *Bay Area to Central Valley High-Speed Train (HST) Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS)*. This chapter describes the basis for circulating the Revised Draft Program EIR, the contents of the revised document, the public comment period, how the Authority will use this document in its decision making, and the relationship of this document to the Authority's project-level EIRs.

1.1 Basis for Circulating Bay Area to Central Valley High-Speed Train Revised Draft Program EIR

In July 2008, the Authority certified the Final Bay Area to Central Valley HST Program EIR¹ (2008 Final Program EIR) for its compliance with the California Environmental Quality Act (CEQA). The Authority then selected the Pacheco Pass Network Alternative with San Francisco and San Jose Termini, preferred alignments, and preferred station locations for further study in project EIRs. The Authority also adopted a mitigation monitoring and reporting program and a statement of overriding considerations. The Authority took these actions in a duly noticed public meeting by adoption of Authority Resolution No. 08-01.

On August 8, 2008, the Town of Atherton, the Planning and Conservation League, the City of Menlo Park, the Transportation Solutions Defense and Education Fund, the California Rail Foundation, and the Bay Rail Alliance filed a lawsuit in the Superior Court for Sacramento County challenging the Authority's actions as being in violation of CEQA. (*Town of Atherton, et al., v. California High-Speed Rail Authority*, Sacramento Superior Court No. 34-2008-8000022.) Following extensive briefing in the case and a hearing on May 29, 2009, Judge Michael Kenny issued a ruling on August 26, 2009. A copy of the ruling is included as Appendix A. In that ruling, the Court concluded that the Authority's 2008 Final Program EIR failed to comply with CEQA in the following respects:

- **ADEQUACY OF PROJECT DESCRIPTION:** "The Court concludes that the description of the alignment of HSR tracks between San Jose and Gilroy was inadequate even for a programmatic EIR. The lack of specificity in turn results in an inadequate discussion of the impacts of the Pacheco alignment on surrounding businesses and residences which may be displaced, construction impacts on the Monterey Highway, and impacts on Union Pacific's use of its right-of-way and spurs and consequently its freight operations." (Ruling, p. 6.)
- **RECIRCULATION AFTER UNION PACIFIC RAILROAD ANNOUNCED ITS UNWILLINGNESS TO ALLOW USE OF ITS RIGHT-OF-WAY:** "[T]his Court concludes that various drawings, maps and photographs within the administrative record strongly indicate that [the Pacheco alignment is dependent upon the use of Union Pacific's right-of-way.] The record further indicates that if the Union Pacific right-of-way is not available, there may not be sufficient space for the right-of-way needed for the HST without either impacting the Monterey Highway or without the acquisition of additional amounts of residential and commercial property.

These are significant impacts which were sufficient to trigger recirculation of the FPEIR." (Ruling, pp. 19-20.)

¹ The May 2008 Final Bay Area to Central Valley High-Speed Train Program Environmental Impact Report was certified by the California High-Speed Rail Authority in July 2008.

- **LAND USE IMPACTS ALONG SAN FRANCISCO PENINSULA:** “As discussed elsewhere in this Court’s ruling, Union Pacific has stated it is unwilling to allow its right-of-way to be used for the project. The need for acquiring additional property is a related issue that will be required to be analyzed in connection with further analysis of the impact of Union Pacific’s denial of use of its right-of-way.” (Ruling, pp. 15-16.)

The Court also held the Authority’s CEQA finding on vibration impacts was not supported by substantial evidence. (Ruling, p. 14.) The Court rejected all other challenges to the content of the 2008 Final Program EIR raised in the litigation.

A final judgment was entered in the case on November 3, 2009, and the Court issued a peremptory writ of mandate on the same day. The judgment and writ directed the Authority to void its certification of the 2008 Final Program EIR, its approval of the Pacheco Pass Network Alternative, and its related approvals of CEQA findings, mitigation plan, and statement of overriding considerations. The writ also directed the Authority to comply with the judgment and with CEQA prior to taking any further action to certify the 2008 Final Program EIR.

On December 3, 2009, the Authority approved resolution HSRA 10-012 as the first step in complying with the court judgment and peremptory writ of mandate. This action rescinded the Authority’s certification of the 2008 Final Program EIR and approval of the Pacheco Pass Network Alternative with San Francisco and San Jose Termini, preferred alignments, and preferred station locations for further study. The Authority’s action also directed staff to prepare the necessary revisions to the program EIR and circulate them in accordance with CEQA for public comment.

1.2 Summary of Revised Draft Program EIR

The Authority revised and recirculated portions of its 2008 Final Program EIR to comply with the *Town of Atherton* court judgment described above. The requirement of the judgment to revise and recirculate portions of the program EIR did not require the Authority to start the program EIR process anew. (*Protect the Historic Amador Waterways v. Amador Water Agency* [2004] 116 Cal.App.4th 1099, 1112.) Recirculation of the EIR “may be limited by the scope of the revisions required.” (*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* [2007] 40 Cal.4th 412, 449.) Where the scope of revisions is limited to certain chapters or portions of the EIR, a lead agency need only recirculate the chapters or portions that have been modified. (*Id.*; citing CEQA Guidelines, § 15088.5, subd. (c).)

Accordingly, the Revised Draft Program EIR contained the following revised information and analysis in response to the *Town of Atherton* court judgment:

Chapter 2: Revised Project Description and Revised Impact Analyses for San Jose to Gilroy

This chapter includes a revised narrative description of the location of HST tracks between San Jose and Gilroy that clarifies that the tracks would be located adjacent to, and not in, Union Pacific Railroad’s (UPRR’s) mainline right-of-way. The description clarifies the relationship of the UPRR right-of-way and the Monterey Highway right-of-way. This chapter also provides revised HST alignment maps and cross sections for San Jose to Gilroy.

Following the revised project description, this section includes a revised discussion of the impacts of the alignment between San Jose and Gilroy on surrounding businesses and residences that may be displaced, construction impacts on the Monterey Highway, impacts on black walnut trees along the Monterey Highway that may qualify as an historical resource, and a clarification of visual impacts. A discussion of the impacts on UPRR’s use of its right-of-way and spurs and its

freight operations between San Jose and Gilroy is included in Chapter 4 as part of a larger discussion of HST's interface with UPRR freight operations.

Chapter 3: Union Pacific Railroad Statements Refusing to Allow Use of Its Rights-of-Way and the Potential for Needing Additional Property for the HST Alignment Alternatives (new discussion)

This chapter includes new text that summarizes UPRR's May 13, 2008, and July 7, 2008, letters to the Authority and their relationship to the program EIR analysis. This chapter then addresses whether and to what extent UPRR's refusal of the use of its right-of-way may result in the need for acquiring additional residential and commercial property for each alignment alternative. The information in this chapter identifies that some alignment alternatives may result in higher land use and property impacts if UPRR mainline right-of-way is unavailable for the HST system.

Chapter 4: Impacts on Union Pacific Railroad Freight Operations (new discussion)

This chapter includes new text that addresses how the various alignment alternatives may affect UPRR freight operations by virtue of being in or adjacent to UPRR operating rights-of-way. This chapter also addresses the potential for secondary impacts that may occur as a result of efforts to avoid or mitigate impacts on UPRR freight operations, and describes that these secondary impacts and needed mitigation measures to address the secondary impacts will be addressed at the project level. This chapter concludes that accommodating UPRR freight operations is similar across the alternatives.

Chapter 5: Costs and Operations (revisions to Chapter 4 of the 2008 Final Program EIR)

This chapter makes changes to capital cost information included in Chapter 4 of the 2008 Final Program EIR to reflect the revised information in Chapter 2 for the San Jose to Central Valley Corridor. This chapter also includes changes to cost information to reflect the revised information in Chapter 3 for San Francisco to San Jose Corridor property impacts.

Chapter 6: High-Speed Train Network and Alignment Alternatives Comparison (revisions to Chapter 7 of the 2008 Final Program EIR)

This chapter makes the necessary changes to Tables 7.2-12, 7.2-13, 7.2-14, 7.2-15, 7.2-16, 7.2-17, 7.2-18, 7.2-19, 7.2-20, 7.2-21, 7.3-2, and 7.3-5 in Chapter 7 of the 2008 Final Program EIR to reflect the revised information and impact analysis in Chapter 2 for San Jose to Gilroy and the revised information in Chapter 3 for San Francisco to San Jose Corridor property impacts.

Chapter 7: Revised Draft Program EIR Material and Designation of a Preferred Network Alternative for Connecting the Bay Area to the Central Valley

This chapter synthesizes the information contained in this revised material and concludes that the new and revised information does not change the recommendation in the 2008 Final Program EIR that the Pacheco Pass Network Alternative with San Francisco and San Jose Termini is the Preferred Network Alternative.

Chapter 8: Unavoidable Adverse Impacts (revisions to Chapter 9 of the 2008 Final Program EIR)

This chapter discusses how the information contained in this revised material affects the unavoidable and adverse impacts in Chapter 9 of the 2008 Final Program EIR.

This Revised Draft Program EIR did not include changes to the vibration analysis in the 2008 Final Program EIR. The court ruling did not find fault with the vibration analysis in the program EIR but rather identified a contradiction between the analysis in the program EIR and the conclusion in the July 2008 CEQA Findings. The Authority will correct this contradiction when it adopts a new set of CEQA findings in conjunction with a new EIR certification and new project approval.

The remainder of the 2008 Final Program EIR either was not challenged in litigation, and is presumed adequate, or was determined by the Court to comply with CEQA

1.3 Public and Agency Involvement

The Authority has involved the public and other public agencies in the program environmental review process pursuant to the requirements of CEQA. This section describes the public and agency involvement efforts in the preparation of prior Bay Area to Central Valley HST environmental documents and the Revised Draft Program EIR.

1.3.1 Prior Draft Program EIR/EIS and Final Program EIR/EIS Notification and Circulation

Notice regarding the availability and the circulation of the 2007 Draft Program EIR/EIS was provided pursuant to CEQA and NEPA requirements. The Draft Program EIR/EIS was released for public review and comment on July 16, 2007. All 1,300 comments submitted to the Authority during this review period were addressed and responded to as part of the May 2008 Final Program EIR/EIS. The draft and final documents and/or notices were distributed to approximately 3,600 statewide contacts, including federal, state, and local elected officials; federal, state, and local agency representatives; chambers of commerce; environmental and transportation organizations; special interest groups; media; private entities; and members of the public. The Draft and Final Program EIR/EIS were made available for viewing and downloading at the Authority's web site, www.cahighspeedrail.ca.gov and also available at libraries in Fremont, Gilroy, Merced, Modesto, Mountain View, Oakland, Pleasanton, Palo Alto, Sacramento, San Francisco, San Jose, and Stockton. Newspaper announcements and postcards were distributed announcing a total of 8 public hearings that were held on the Draft Program EIR/EIS in 2007 in San Francisco, San Jose, Livermore, Oakland, Gilroy, Merced, Stockton, and Sacramento.

1.3.2 Notification and Circulation of the Revised Draft Program EIR Material

The Authority circulated a March 2010 Revised Draft Program EIR to comply with the final judgment in the *Town of Atherton* litigation on the 2008 Final Program EIR/EIS

Notice regarding the availability and the circulation of the March 2010 Revised Draft Program EIR was provided pursuant to CEQA. The Revised Draft Program EIR was made available to the public through the Authority website (www.cahighspeedrail.ca.gov) on March 4, 2010. Between March 8th and 12th, the Revised Draft Program EIR was distributed. Either a printed copy or a CD along with a Notice of Availability was sent to over 330 state and federal agencies, elected officials, Native American groups, other groups, and individuals who previously commented. In accordance with CEQA, a Notice of Completion was filed with the State Clearinghouse on March 11, 2010 initiating the required 45-day public comment period that extended to April 26, 2010. The Revised Draft Program EIR and a Notice of Availability and of a Public Meeting was also made available to 16 libraries for public viewing. These libraries, listed in Table 1-1, also had copies of the 2008 Final Program EIR/EIS available to the public. The Notice of Availability and Notice of a Public Meeting was distributed to approximately 3,800 individuals on the program mailing list on March 12, 2010 and published in 8 newspapers throughout Bay Area and Central Valley including the San Francisco Examiner, Fresno Bee, San Jose Mercury News, Daily Republic, Merced Sun Star, Modesto Bee, Oakland Tribune, and Sacramento Bee. On March 15th, a Notice of Availability and Notice of a Public Meeting postcard was further distributed to over 50,000 individuals identified as part of on-going project-level engineering and environmental studies. On March 22, 2010, the Authority also made the Bay Area to Central Valley HST Revised Draft Program EIR Material References available through the Authority's website.

**Table 1-1
 Revised Draft Program EIR Material Library Viewing Locations**

Library	Location
Fremont Main Library, Reference Department	2400 Stevenson Boulevard Fremont, CA 94538
Gilroy Library	7387 Rosanna Street Gilroy, CA 95020
Livermore Public Library	1188 S Livermore Ave. Livermore, CA 94550
Menlo Park Library	800 Alma Street Menlo Park, CA 94025
Merced County Library	2100 "O" Street Merced, CA 95340
Stanislaus County Library, Government Documents Section	1500 "I" Street Modesto, CA 95354
City of Mountain View General Public Library	585 Franklin Street Mountain View, CA 94040
Oakland Public Library	125 14th Street Oakland, CA 94612
Palo Alto Main Library	1213 Newell Road Palo Alto, CA 94303
Pleasanton Public Library	400 Old Bernal Avenue Pleasanton, CA 94566
California State Library, Government Publications Section	914 Capitol Mall, Room 402 Sacramento, CA 95814
Sacramento Central Library	828 I St. Sacramento, CA 95814
San Francisco Main Library, Government Information Center, 5th Floor	100 Larkin Street San Francisco, CA 94102
Dr. Martin Luther King Jr. Library, Reference Department, Room 285	150 East San Fernando Street San Jose, CA 95112
Cesar Chavez Central Library	605 North El Dorado Street Stockton, CA 95202
Tracy Branch Library	20 E. Eaton Avenue Tracy, CA 95376-3100

The Authority held two Public Meetings in San Jose on April 7, 2010 to receive comments from the public and public agencies on the Revised Draft Program EIR Material. One meeting was held in the morning from 10:00 a.m. to 12:00 p.m. at the Sheriff's Auditorium at 55 West Younger Avenue in San Jose, and one was held from 5:00 p.m. to 7:00 p.m. at the Santa Clara County Board of Supervisors Chambers at 70 West Hedding Street in San Jose. Hundreds of people attended the two public meetings and more than fifty individuals offered verbal comments.

A. COMMENTS ON THE REVISED DRAFT PROGRAM EIR

Written comments on the Revised Draft Program EIR were sent to the Authority in the form of letters and faxes, and were also sent through the Authority's website. Comments from the two public meetings were transcribed as well. Table 1-2 lists the number of those providing comments during the public comment period including those from the public meetings. Some of the letters received listed multiple agencies or individuals. No comments were received from federal agencies. More than 540 people provided over 3,750 comments during the circulation period (either through written letters or oral testimony).

**Table 1-2
 Comment Submittals on the Revised Draft Program EIR**

Type of Commenter	Number of Commenters	Number of Comments
State Agencies	2	21
Local Agencies	27	553
Organizations	25	265
Individuals	438	2,803
Public Hearings	53	113
Total	545	3,755

The verbal and written comments received during the public comment period addressed the broad spectrum of issues related to an EIR. Some comments addressed the revised and new materials in the Revised Draft Program EIR. Many other comments addressed the content of the May 2008 Final Program EIR. Most of the commenters expressed their views on the high-speed train project and the selection of a network alternative to connect the Bay Area to the Central Valley. The comments are included in Volume 2 of the Revised Final Program EIR.

1.4 California High-Speed Rail Authority's Preparation of and Use of Revised Final Program EIR

Following the public comment period on the Revised Draft Program EIR, the Authority has prepared this Revised Final Program EIR. The Revised Final Program EIR includes the full text of the Revised Draft Program EIR with changes based on the comments incorporated (Volume 1); written and verbal comments received on the Revised Draft Program EIR and responses to comments (Volume 2); and the complete 3-volume text of the 2008 Final Program EIR.

At a subsequent publicly noticed meeting, the Authority will consider the Revised Final Program EIR and the entire record before it, in making the following determinations of whether to:

- Certify the Revised Final Program EIR for compliance with CEQA.
- Select a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs.

- Approve findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program in compliance with CEQA.

1.5 Relationship of Bay Area to Central Valley High-Speed Train Program EIR Process to Project-Level EIR Processes

The *Town of Atherton* court judgment on the 2008 Final Program EIR did not require the Authority to halt its project-level EIR work for the Bay Area to Central Valley sections, which includes San Francisco to San Jose and San Jose to Merced. The Authority's project-level work is therefore continuing at the same time the Authority is taking the steps needed to bring its program EIR into compliance with CEQA. At the conclusion of the program EIR process, the Authority will make a new decision on a network alternative, preferred alignments, and preferred station locations. The new decision will be carried forward for further study in project-level EIRs and may result in changes to one or more currently proceeding project-level EIRs.

CHAPTER 2
REVISED PROJECT DESCRIPTION AND REVISED IMPACT
ANALYSES: SAN JOSE TO GILROY

2 REVISED PROJECT DESCRIPTION AND REVISED IMPACT ANALYSES: SAN JOSE TO GILROY

This chapter provides a revised description of the proposed location of HST tracks between San Jose and Gilroy as required by the court judgment. Based on the revised project description, this chapter then provides a revised discussion of land use impacts between San Jose and Gilroy, a new discussion of impacts on the Monterey Highway and impacts on certain trees along Monterey Highway that qualify as an historical resource, and a clarification of visual impacts. Finally, this chapter includes revised Appendix 2-D plan and profile sheets and revised Appendix 2-E cross sections for San Jose to Gilroy (included after section 2.7). The revised plan and profile sheets and revised cross sections provide additional detail regarding the proposed horizontal location and vertical profile of HST tracks between San Jose and Gilroy. A new discussion of impacts on UPRR freight operations between San Jose and Gilroy are addressed in Chapter 4 of this document. The 2008 Final Program EIR impacts analyses for other resource areas are not affected by the revised project description for San Jose to Gilroy. Review of the Final Program EIR identified that the only areas requiring revisions are land use, traffic, aesthetics and visual resources, and cultural resources (Parsons internal comm. 2010a).

The 2008 Final Program EIR divided the Bay Area to Central Valley study area into six corridors. The HST alignment between San Jose and Gilroy is within the San Jose to Central Valley corridor. These revisions therefore refer to the San Jose to Central Valley corridor; however, the revisions are limited to the alignment between San Jose and Gilroy.

2.1 Revised Project Description: San Jose to Gilroy

The following revised description of the alignment alternatives between San Jose and the Central Valley replaces the description in the 2008 Final Program EIR, Chapter 2, page 2-40. Changes to text in the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with strikeout.

San Jose to Central Valley

The alignment alternatives and station location options in this corridor carried forward for further consideration are illustrated in Figure 2.5-7 (in the 2008 Final Program EIR) and discussed below.

Alignment Alternatives Carried Forward

Pacheco Pass Alignments

- Caltrain/Gilroy/Henry Miller Avenue: This alignment alternative would extend south along the Caltrain/UPRR rail corridor through the Pacheco Pass and then the San Joaquin Valley. From San Jose to Lick (a point near Pullman Way in San Jose), the alignment would be located within the Caltrain-owned right-of-way. From Lick to Gilroy, the alignment would be located adjacent to and on the east side of UPRR's mainline right-of-way, using portions of the Monterey Highway right-of-way between San Jose and north of Morgan Hill. From north of Morgan Hill to Gilroy, the alignment would be adjacent to and on the east side of the UPRR mainline right-of-way. Station location options include the existing San Jose (Diridon) Station and Gilroy (near the existing Caltrain Station) or Morgan Hill (near the existing Caltrain Station).
- Caltrain/Gilroy/GEA North/Merced: This alignment alternative would extend south along the Caltrain/UPRR rail corridor through the Pacheco Pass, pass through the northern portion of the Grasslands Ecological Area (GEA) and then across the San Joaquin Valley. From San Jose to Lick (a point near Pullman Way in San Jose), the alignment would be located in the Caltrain-owned right-of-way. From Lick to Gilroy, the alignment would be located adjacent to and on the east side of UPRR's mainline right-of-way, using portions of the Monterey Highway right-of-way

between San Jose and north of Morgan Hill. From north of Morgan Hill to Gilroy, the alignment would be adjacent to and on the east side of the UPRR mainline right-of-way. Station location options include the existing San Jose (Diridon) Station and Morgan Hill (near the existing Caltrain Station) or Gilroy (near the existing Caltrain Station).

2.2 Revised Land Use Analysis: San Jose to Gilroy

The following is a revised land use analysis for the alignment alternative between San Jose and the Central Valley, in response to the court ruling. This discussion replaces the discussion for the Pacheco alignment alternative in the 2008 Final Program EIR, Chapter 3.7, pages 3.7-33 and 3.7-34 (Parsons internal comm. 2010b). Changes to text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with strikeout. The 2008 Final Program EIR identified the HST system's land use impacts as significant for purposes of CEQA and identified mitigation strategies to be carried forward into project-level EIRs to address land use compatibility, communities and neighborhoods, property, and environmental justice impacts. There are no changes to the CEQA significance conclusions or mitigation strategies for the land use analysis based on these revisions for the San Jose to Gilroy portion of the discussion.

Regulatory Requirements and Methods of Evaluation (page 3.7-1)

No revisions or additions required for Regulatory Requirements or Methods of Evaluation. The methods, however, are provided below for ease of reference.

The analysis was conducted using U.S. Census 2000 block group information/data compiled in a geographic information systems (GIS) format, local community general plans or regional plans, and land use information provided by the planning agencies in each of the regions. Existing and future conditions were described for the No Project Alternative by documenting existing information for existing and planned future land use policy near HST Alignment Alternatives and potential station location options, development patterns for employment and population growth, demographics, communities and neighborhoods, housing, and economics. The No Project Alternative was compared to the planned uses reflected in general plans and regional plans to see if it may result in potential effects on future development. The general and regional plans consulted for this section are listed in Chapter 14, "Sources Used in Document Preparation" in the Final Program EIR.

The ranking systems described below were used to evaluate potential impacts for the HST Alignment Alternatives for land use changes, land use compatibility, and property. Potential impacts on communities and neighborhoods were also considered. The presence of minority populations and low-income populations in the study area for an alignment alternative was identified to consider potential environmental justice issues. Because this is a programmatic environmental review, the analysis of these potential impacts was performed on a broad scale to permit a comparison of relative differences among the alignment alternatives. Further evaluation of potential impacts would occur at the project-level environmental review.

Land Use Compatibility

Future land use compatibility is based on information from general plans and other regional and local transportation planning documents. These documents were examined to assess an alignment alternative's potential consistency with the goals and objectives defined therein. An alignment alternative is considered highly compatible if it would be located in areas planned for transportation multi-modal centers or corridor development, redevelopment, economic revitalization, transit-oriented development, or high-intensity employment. Compatibility would be considered low if an alignment alternative would be potentially inconsistent with local or regional planning documents. For example, homes and schools are more sensitive to changes that may result in increased noise and vibration (see Section 3.4, "Noise and Vibration" in the Final Program EIR) or increased levels of traffic congestion (see Section 3.1, "Traffic, Transit, Circulation, and Parking" in the Final Program EIR).

Industrial uses, however, are typically less sensitive to these types of changes because they interfere less with normal industrial activities. Because in this analysis an area's sensitivity or compatibility is based on the presence of residential properties, low, medium, and high levels of potential compatibility are identified based on the percentage of residential area affected, the proximity of the residential area to facilities included in an alignment alternative, and the presence of local or regional uses (such as parks, schools, and employment centers). For highway corridors (under the No Project Alternative) and for proposed alignment alternatives, land use compatibility was assessed using GIS layers (or aerial photographs where available) to identify proximity to housing and population and to determine whether the alignment alternatives would be within or outside an existing right-of-way in the study area. Potential impacts are considered low if existing land uses within a potential alignment, station, or maintenance facility area are found to be compatible with the land use changes that may result from the alignment alternative. The type of improvement that would be associated with the alignment alternative would also affect the level of potential impact. Improvements such as potential widening of an existing right-of-way or the need for new right-of-way were considered to have a low compatibility with agricultural land. Conversely, if the improvement would be contained within the existing right-of-way or within a tunnel, the alignment alternative was considered compatible with agricultural land.

Table 2-1 summarizes the potential compatibility rating of existing and planned land use types with the potential HST Alignment Alternatives and station location options. Therefore, where potential compatibility would be rated low, the potential for adverse impacts would be higher, and where potential compatibility would be rated high, the potential for adverse impacts would be lower.

**Table 2-1
 Unchanged Table 3.7-1—Compatibility of Land Use Types**

Low Compatibility	Medium Compatibility	High Compatibility
Single-family residential, neighborhood and community parks, habitat conservation area, elementary/middle school, agricultural (widened or new right-of-way needed)	Multifamily residential, high schools, low-intensity industrial, hospitals	Business park/regional commercial, multifamily residential, existing or planned transit center, high intensity industrial park, service commercial, commercial recreation, college, transportation/utilities, high-intensity government facilities, airport or train station, agricultural (tunnel or no new right-of-way needed)

Communities and Neighborhoods

A potential impact on a community or neighborhood was identified if an alignment alternative would create a new physical barrier, isolating one part of an established community from another and potentially resulting in a physical disruption to community cohesion. Improvements to existing transportation corridors, including grade separations, would not generally result in new barriers.

Property

Assessment of potential property impacts is based on the types of land uses adjacent to the particular proposed alignment alternative, the amount of right-of-way potentially needed due to the construction type, and the land use sensitivity to potential impacts. Impacts include potential acquisition, displacement and relocation of existing uses, or demolition of properties.

In some instances, relatively minor strips of property would be needed for temporary construction easements or permanent right-of-way for the proposed HST Alignment Alternatives. In other instances, development of proposed facilities could result in acquisition, displacement, and/or relocation of existing structures. The types of property impacts that could occur include displacement

of a residence or business or division of a farm or other land use in a way that makes it harder to use. Mitigation may also be required to maintain property access. Potential property impacts were ranked high, medium, or low, as summarized below in Table 2-2 (see Table 3.7-A-1 in Appendix 3.7-A in the Final Program EIR for more detail).

**Table 2-2
 Unchanged Table 3.7-2—Rankings of Potential Property Impacts**

Facility Requirements	Type of Development						
	Residential			Nonresidential			
	Rural/ Suburban	Suburban/ Urban	Urban	Rural Developed	Suburban Industrial/ Commercial	Urban Business Parks/ Regional Commercial	Rural Undeveloped
No additional right-of-way needed (also applies to tunnel segments for HST Alignment Alternatives)	Low	Low	Low	Low	Low	Low	Low
Widening of existing right-of-way required	Medium	Medium	High	Low	Medium	High	Low
New corridor (new right-of-way required; includes aerial and at-grade arrangements)	High	High	High	Medium	Medium	High	Low to medium

To determine potential property impacts, the land uses within 50 ft of either side of the existing corridor or within 50 ft of both sides of the centerline for new HST alignments were characterized by type and density of development. Densities of structures, buildings, and other elements of the built environment were generally higher in urbanized areas. *Rural/suburban residential* refers to low-density, single-family homes. *Suburban/urban residential* refers to medium density, multifamily housing, such as townhouses, duplexes, and mobile homes. *Urban residential* refers to high-density multifamily housing, such as apartment buildings. *Rural developed nonresidential* uses typically occur in nonurbanized areas and often include developed agricultural land, such as vineyards and orchards. *Suburban industrial/commercial* refers to medium density nonresidential uses and includes some industrial uses, as well as transportation, utilities, and communication facilities. *Urban business parks/regional commercial* refers to nonresidential uses that occur in urbanized areas and includes such uses as business parks, regional commercial facilities, and other mixed use/built-up uses. *Nonrural undeveloped land* includes cropland, pasture, rangeland, and few structures. The classification of development type was based on land use information provided by the planning agencies in each of the regions.

Environmental Justice

This analysis is based on identifying the presence of minority populations and low-income populations in the study area (0.25 mi from a potential alignment), and generally in the counties crossed by the alignment alternatives. The assessment was done using U.S. Census 2000 information and alignment information to determine if minority or low-income populations exist within the study areas, and if they do, whether the alignments would be within or adjacent to an existing transportation right-of-way (lower potential for impacts) or a new alignments (higher potential for impacts).

The analysis was used to determine whether:

- At least 50% of the population in the study area may be minority or low income.
- The percentage of minority or low-income population in the study area is at least 10% greater than the average generally in the county or community.

The assessment of potential for impacts on minority and low-income populations considered the size and type of right-of-way needed for the alignment alternatives. For example, if an alignment alternative would be within an existing right-of-way, the potential for adverse impacts would be lower. If the alignment alternative would be on new right-of-way, the potential for adverse impacts may be higher. The potential alignment alternatives, however, have been identified and described to largely use or be adjacent to existing transportation rights-of-way to avoid or reduce potential impacts on natural resources and existing communities to the extent feasible and practicable (see Chapter 2, "Alternatives" in the Final Program EIR). In some cases, the minority and low-income thresholds identified above were met or exceeded, but the geographic area (of the block group) was large and sparsely populated. In these areas, the minority and/or low income populations are distant from the proposed alignment alternative. For these areas, the environmental justice impacts were considered as low, given the distance between the environmental justice populations and the HST line.

Because this is a program-level document, the analysis considers the alternatives on a broad scale. The Statewide Program EIR/EIS concluded that the overall system would not result in a disproportionate impact on minority or low-income populations. Additional analysis would take place during project-level analysis to consider potential localized impacts.

A. CRITERIA FOR DETERMINING CEQA SIGNIFICANCE

Under CEQA, two types of potential impacts are considered in the determination of significance for the land use evaluation; namely, the potential for the project to:

- Physically divide an established community or be incompatible with adjacent land uses in the short or long term.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The evaluation methods described above provide for the review of these types of potential impacts.

Affected Environment (page 3.7-5)

No revisions or additions required.

Environmental Consequences, High-Speed Train Alternative (page 3.7-33)

San Jose to Central Valley Corridor

Land Use Compatibility

Alignment Alternatives

Pacheco: The Pacheco alignment alternative would be highly compatible with the existing Caltrain rail corridor between San Jose and Gilroy. However, as the alignment alternative veers from the existing rail corridor east of Gilroy, it would potentially be incompatible as it proceeds through agricultural land and parkland. Overall, this alignment alternative would have a medium compatibility with surrounding land uses.

Station Location Options

San Jose (Diridon): The proposed San Jose (Diridon) station location option would be highly compatible with the existing San Jose Diridon Caltrain station and the surrounding industrial and high-density residential uses. The station location option would be consistent with the *San Jose Downtown Strategy Plan* that promotes redevelopment of the downtown toward the west and closer to the station location option.

Morgan Hill: The Morgan Hill station location option would be highly compatible with the existing Caltrain station and nearby commercial/service oriented and other urban uses. The station location option would be consistent with the *City of Morgan Hill General Plan* policies that support the expansion of alternative transportation systems, as well as the development of a multi-modal transit transfer center.

Gilroy: The Gilroy station location option would be highly compatible with the existing Caltrain station and adjoining commercial uses; however, it would be incompatible with the adjacent single-family residential uses. The proposed station would be consistent with the policies and actions stated in the *Gilroy General Plan* that place a high priority on strengthening and restoring the downtown area, including the development of an active multi-modal transit center. Although the proposed station location option would be incompatible with the existing low-density residential uses, the general plan promotes the future development of higher-density residential and mixed uses in close proximity to the Caltrain station and the multi-modal transit center.

Communities and Neighborhoods

Pacheco: This alignment alternative traverses the dense urban city of San Jose but also travels through small rural cities and unincorporated areas such as Coyote, Morgan Hill, Gilroy, San Martin, and San Felipe, which consist of small single-family residential neighborhoods and farmsteads. In northern San Felipe, the alignment alternative has a low potential to impact farmsteads; however, there would be no loss of community or neighborhood cohesion as a result. In other locations where this alignment alternative would create a new transportation corridor (east of Gilroy), the alignment alternative would primarily pass through agricultural or open space lands and would not result in community cohesion impacts on neighborhoods.

Property

Pacheco: Between the proposed Diridon station and Lick, the right-of-way is owned by the Peninsula Corridor Joint Powers Board (PCJPB or Caltrain). The HST would be built largely within the existing rail right-of-way. The potential for property impacts is between low and medium. From Lick to Morgan Hill (where Monterey Highway is immediately adjacent to the mainline UPRR right-of-way), the HST would be built within the right-of-way of the existing Monterey Highway. Generally, north of Bernal Road, in the City of San Jose, the existing highway right-of-way is sufficient to accommodate both a reconfigured roadway and the HST facilities. South of Bernal Road, Monterey Highway would be shifted to the east of the existing roadway in places to accommodate the HST facilities. This shift would vary from 0 to approximately 60 feet, depending on location. As the existing land use in this

area is largely agricultural, the potential property impacts would be low. Between Morgan Hill and south of the proposed Gilroy station location, the HST would run adjacent to the UPRR right-of-way. The HST would require a 50- to 60-foot right-of-way for either at-grade or aerial alignments. Development in this area is a mix of low-density residential and industrial uses and agriculture, yielding a potential property impact ranking between low and medium, depending on location. In addition, grade separations along the alignment alternative could entail the conversion of residential and nonresidential property at selected locations. However, the alignment would create new right-of-way within existing transportation corridors. The proposed San Jose to Central Valley Corridor would require new right-of-way east of the City of Gilroy. Overall, potential for property impacts is between low and medium (Table 2-3).

Environmental Justice

The study area for the San Jose to Central Valley corridor includes a variety of neighborhoods and a diverse multiethnic population. All four alignment alternatives have environmental justice populations that exceed the thresholds. Where the alignment alternatives use existing rail rights-of-way (i.e., along the Caltrain Corridor from San Jose to Lick), they would not be expected to result in disproportionate impacts on environmental justice communities. From Lick to Gilroy, the alignment would be located adjacent to and on the east side of the UPRR right-of-way, using portions of the Monterey Highway right-of-way between San Jose and north of Morgan Hill. From north of Morgan Hill to Gilroy, the alignment would be adjacent to and on the east side of the UPRR mainline right-of-way. From Lick to Gilroy the alignment would not be expected to result in disproportionate impacts on environmental justice communities. The environmental justice population(s) percentages exceed the thresholds east of Gilroy in the open space and more rural areas, but these populations are sparse and distant from the alignment alternatives.

Role of Design Practices in Avoiding and Minimizing Effects (page 3.7-41)

No revisions or additions required.

Mitigation Strategies and CEQA Significance Conclusions (page 3.7-42)

No revisions required. Land use impacts between San Jose and Gilroy are considered significant under CEQA.

Subsequent Analysis (page 3.7-44)

No revisions or additions required.

Table 2-3
Revised Table 3.7.3—Land Use Summary Data Table for Alignment Alternatives and Station Location Option Comparisons

Corridor	Possible Alignments	Alignment Alternative	Land Use Compatibility (H,M,L)	Community Cohesion Impacts (Y/N)	Potential For Property Impacts (H,M,L)	Environmental Justice (EJ) Impacts (H,M,L)
San Jose to Central Valley: Pacheco Pass	1 of 1	Pacheco	M Highly compatible with existing Caltrain Corridor between San Jose and Gilroy. Low compatibility with agricultural land and open space, east of Gilroy.	N	L / M Alignment within existing Caltrain Corridor between Diridon station and Lick. Lick to Morgan Hill within Monterey Highway right-of-way. Between Morgan Hill and Gilroy adjacent to UPRR right-of-way. East of Gilroy, alignment within agricultural and open space.	M Alignment within existing Caltrain Corridor between Diridon station and Lick. Lick to Morgan Hill within Monterey Highway right-of-way. Between Morgan Hill and Gilroy adjacent to UPRR right-of-way. New alignment east of Gilroy. Although the EJ percentage thresholds are exceeded east of Gilroy, the EJ populations are sparse and distant from the HST line.
	1 of 3	Henry Miller (UPRR Connection)	M Highly compatible with existing Henry Miller Road between Santa Nella and Elgin Avenue. New alignment right-of-way would be incompatible with agricultural uses east of Elgin Avenue.	N	L Alignment would be built through agricultural land. Impacts would be minimal.	L Alignment alternative would create new transportation right-of-way. Although the EJ percentage thresholds are exceeded, the populations are sparse and distant from the HST line.
		Henry Miller (BNSF Connection)	M Highly compatible with existing Henry Miller Road between Santa Nella and Elgin Avenue. New alignment right-of-way would be incompatible with agricultural uses east of Elgin Avenue.	N	L Alignment would be built through agricultural land. Impacts would be minimal.	L Alignment alternative would create new transportation right-of-way. Although the EJ percentage thresholds are exceeded, the populations are sparse and distant from the HST line.

Corridor	Possible Alignments	Alignment Alternative	Land Use Compatibility (H,M,L)	Community Cohesion Impacts (Y/N)	Potential For Property Impacts (H,M,L)	Environmental Justice (EJ) Impacts (H,M,L)
		GEA North	L Incompatible with agricultural uses.	N	L Alignment would be built through agricultural and open space. Impacts would be minimal.	H Alignment alternative would create new transportation right-of-way. Percentages of EJ populations exceed thresholds.
San Jose (Diridon)			H Compatible with San Jose Diridon Caltrain station and industrial uses. Consistent with plans for downtown redevelopment.	N	L Station would be located at the current Caltrain station site.	L Percentage of EJ populations is lower than the thresholds.
Morgan Hill (Caltrain)			H Compatible with Morgan Hill Caltrain station and commercial uses. Consistent with plans for development of multi-modal transit transfer center.	N	L Station would be located at the current Caltrain station site.	L Percentages of EJ populations are lower than the thresholds.
Gilroy (Caltrain)			M Highly compatible with existing Gilroy Caltrain station and commercial uses. Low compatibility with single-family residential use. Consistent with policies for development of a multi-modal transit center.	N	L / <u>M</u> Station would be located at <u>near</u> the current Caltrain station site.	M Station constructed at <u>near</u> existing Gilroy Caltrain Station. Percentages of EJ populations within station area exceed thresholds.

2.3 Revised Traffic Analysis: San Jose to Gilroy

The following is an additional traffic analysis that resulted from the revised description of the alignment alternatives between San Jose and the Central Valley. This discussion adds to the 2008 Final Program EIR, Chapter 3.1, pages 3.1-18, 3.1-23, 3.1-31, 3.1-37, and 3.1-39. Changes to text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with strikethrough.

Regulatory Requirements and Methods of Evaluation (page 3.1-1, 2008 Final Program EIR)

No revisions or additions required.

Affected Environment, Study Area Corridors and Potential High-Speed Train Stations

(page 3.1-18, 2008 Final Program EIR)

San Jose to Central Valley Corridor

Monterey Highway is a segment of El Camino Real, the original trail developed by Spanish missionaries to link the California missions in the 18th and 19th centuries. As California developed, so did Monterey Highway. This history is reflected in its design.

Monterey Highway was the original route of US 101 and some portions carried this designation until the early 1980s. Until the late 1940s, US 101 followed Monterey Highway all the way from Gilroy to downtown San Jose. In the late 1940s, a bypass of San Jose was built, starting at what is now Blossom Hill Road. In the early 1970s, a bypass was built from south of Gilroy to Cochrane Road in Morgan Hill. In the early 1980s, US 101 was completed between Blossom Hill Road and Cochrane Road and widened to its present eight lanes in the 1990s.

Each of the US 101 projects diverted traffic off Monterey Highway, so that in 2009, the highway carried much less traffic than it was originally designed to support. The existing peak hour roadway level of service (LOS) along Monterey Highway, between Southside Drive in southern San Jose and Bailey Road near Morgan Hill, varies mostly between A and C, showing uncongested conditions even during peak hours in most locations.¹ However, in a few locations, the LOS degrades to LOS D during peak hours, denoting delays and some traffic backup.

No portion of Monterey Highway exists as a freeway; therefore, travel speeds are limited. US 101, which runs parallel to Monterey Highway, tends to provide a faster north/south travel alternative, even during peak travel times, and hence serves to divert some traffic from Monterey Highway.

Environmental Consequences, No Project Alternative (page 3.1-23, 2008 Final Program EIR)

As discussed above in the Affected Environment, peak hour roadway LOS along Monterey Highway in the San Jose to Central Valley Corridor shows mostly uncongested (LOS A and C) conditions, with a few locations at LOS D, denoting delays and some traffic backup. Preliminary projections for year 2035 evening peak-hour volumes along Monterey Highway, between Southside Drive and Bailey Road, indicate that traffic volumes are expected to be higher in the southbound direction, leading to LOS E or F, showing congested travel conditions in the corridor. In the northbound direction, approximately 60% of the Monterey Highway corridor is projected to operate under LOS C or better, showing mostly uncongested travel conditions.

¹ City of San Jose (data collected between 2007 and 2009).

Environmental Consequences, High-Speed Train Alternative (changes from 2010 Revised Program EIR Material)

San Jose to Central Valley Corridor

As discussed above in the Affected Environment, Monterey Highway in the San Jose to Central Valley Corridor is six lanes wide for approximately six miles from Hollywood Avenue Southside Drive to south of Blossom Hill Road, and four lanes wide south of Blossom Hill Road. For the HST project, ~~segments of Monterey Highway from approximately Southside Drive Umbarger Road to south of Blossom Hill Road (approximately 3.3 miles) Metcalf Road (near Bailey Road)~~ are is proposed to be narrowed from six lanes to four lanes to provide a cost-effective right-of-way corridor for HST by minimizing property acquisition along the HST alignment. On June 22, 2009, the Task Force managing development of a comprehensive update to the City of San Jose's General Plan unanimously endorsed the reduction of Monterey Highway from six to four lanes for the purpose of accommodating the HST project. In addition, the City and Caltrans are pursuing relinquishment of portions of Monterey Highway (State Route 82) in San Jose, from the jurisdiction of Caltrans to the City of San Jose, to further facilitate any corridor modifications necessitated by the ongoing development of the HST project.

With the reduction of lanes on a portion of Monterey Highway and with HST, traffic congestion is projected to increase slightly in both directions, as shown in Table 2-4. The preliminary information provided in this table is from the City of San Jose's long-range planning process and represents preliminary evaluation of LOS in the Monterey Highway corridor using the City's traffic model. The assumptions of this forecast consider a base scenario with Monterey Road being six lanes from Umbarger to south of Blossom Hill Road, and a project scenario with four lanes on Monterey Highway for this section ~~from Blossom Hill Road~~. The forecast does not incorporate the mode shift to HST, and therefore represents a conservative scenario.

**Table 2-4
 Traffic Conditions on Monterey Highway With and Without the Project During
 Evening Peak Period (Year 2035)**

MONTEREY HIGHWAY SEGMENT		Northbound						Southbound					
		6 LANES – BASE CASE			4 LANES – WITH HST PROJECT *			6 LANES – BASE CASE			4 LANES – WITH HST PROJECT *		
From	To	Peak Hr Vol	V/C	LOS	Peak Hr Vol	V/C	LOS	Peak Hr Vol	V/C	LOS	Peak Hr Vol	V/C	LOS
Southside	Capitol	1,791	0.629	B	1,490	0.784	C	2,753	0.966	E	1,880	0.989	E
Capitol	Senter	2,101	0.737	C	1,504	0.792	C	2,894	1.015	F	1,907	1.004	F
Senter	Branham	2,114	0.742	C	1,593	0.839	D	2,790	0.979	E	1,853	0.975	E
Branham	Chynoweth	2,330	0.818	D	1,746	0.919	E	2,727	0.957	E	1,835	0.966	E
Chynoweth	Blossom Hill	2,574	0.903	E	1,947	1.025	F	2,637	0.925	E	1,885	0.992	E
Blossom Hill	Bernal	1,807	0.623	B	2,004	0.691	B	3,252	1.121	F	3,019	1.041	F
Bernal	Metcalf	3,081	1.027	F	3,153	1.051	F	3,148	1.049	F	2,919	0.973	E
Metcalf	Bailey	2,800	0.933	E	2,869	0.956	E	3,071	1.024	F	2,846	0.949	E

Source: San Jose Department of Transportation 2010.

Peak Hr Vol = peak hour volume.

V/C = volume-to-capacity ratio.

*Does not account for trips that would be diverted from auto to high-speed rail

In the northbound direction, degradation of LOS in the evening peak hour by one level of service for four northbound segments between Southside Drive and Capitol (LOS B to LOS C) and between Senter and Blossom Hill (LOS C to E, D to E, and E to F) are anticipated based on the preliminary evaluation of reduction from six to four lanes of Monterey Highway. The other portions of Monterey Highway in the northbound direction are projected to see a slight increase in congestion, with an associated slight reduction in LOS. In the southbound direction, all road segments are projected to operate at LOS E or F. Congestion would decrease for five of the eight segments and an increase in LOS between Bernal and Bailey (from LOS F to LOS E), while the remaining three segments would have a slight increase in congestion.

The information in Table 2-4 above indicates that the narrowing of lanes on Monterey Highway, when viewed in isolation, would result in a diversion of traffic onto other major and more local roadways in the vicinity. The potential for traffic diversion will be examined in detail in a project-level EIR if a network alternative that includes the Monterey Highway narrowing is selected. This examination will include consideration of mode shifts from auto trips to the High-Speed Train, which is discussed in section 3.1 of the 2008 Final Program EIR.

The City of San Jose Department of Transportation has provided a letter to the Authority supporting the reconstruction of Monterey Highway to enable the construction of the HST in this corridor (Appendix B). Pending more detailed evaluation at the project level, a potentially significant traffic impact would occur where the northbound four-lane Monterey Highway LOS degraded to LOS D or worse between Senter and Blossom Hill. The reduction of travel lanes on Monterey Highway and the addition of HST would not be anticipated to result in a significant impact for the southbound segments based on a preliminary evaluation by the City of San Jose Department of Transportation.

Role of Design Practices in Avoiding and Minimizing Effects (page 3.1-37, 2008 Final Program EIR)

No revisions or additions required.

Mitigation Strategies and CEQA Significant Effects (page 3.1-37, 2008 Final Program EIR)

The degradation of LOS for three northbound segments (between Southside Drive and Senter and between Blossom Hill and Bernal) of a four-lane Monterey Highway between Southside Drive and Bailey Road will require that a Transportation Impact Analysis be prepared at the project-level to evaluate specific impacts and identify mitigation measures. At the program level, mitigation strategies may include:

- Optimizing signal timings (for the revised traffic volumes and capacity)
- Synchronizing signals (Coordinating the timing of the signals between successive intersections, and automatically adjusting the traffic signals to facilitate the movement of vehicles through the intersections. This will help in reducing overall stops and delays. This works well if the distance between adjacent signals is a quarter of a mile or less).
- Selectively adding new turn lanes at intersections. (For example, adding two left-turn lanes instead of an existing single left-turn lane. The traffic analysis will show which intersections would require additional turn lanes. Adding turn lanes would be much more economical/affordable than adding whole lanes.)
- Promoting more transit usage in the corridor by increasing frequency of popular transit services.

Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce impacts for the three northbound segments of a four-lane Monterey Highway to a less-than-significant level in all circumstances. This document therefore

concludes that traffic impacts on these segments may be significant, even with the application of mitigation strategies.

Subsequent Analysis (changes from 2010 Revised Program EIR Material)

A transportation impact analysis will be conducted at the project-level, which will include a detailed evaluation of traffic, parking, pedestrian, bicycle, transit, construction and cumulative transportation impacts of the proposed HST project. This information will identify: (1) Changes in traffic volumes on regional roadways that result from HST construction and operations (2) Changes in traffic volumes on local streets that result from passengers accessing/leaving HST stations, from project construction, and from other HST related roadway changes, and the effect of these changed volumes on roadway operations and critical intersections. (3) The analysis of number of parking spaces required and the placement of the parking facilities will be evaluated. Potential parking impacts will be evaluated based on the existing and future parking supply and the projected parking demand. Parking demand will be based upon the patronage and mode of access forecasts at each proposed station, including parking and related circulation impacts for adjacent neighborhoods. (4) potential impacts to transit including potential for inadequate capacity of feeder bus service, potential for traffic congestion from project to disrupt or delay bus service that serve or run near stations or other transit operations. Potential impacts of project construction on transit service will also be evaluated in detail. (5) The project-level traffic impact analysis study will also evaluate the effect of the project and project construction on existing and planned pedestrian and bicycle facilities. Potential impacts on pedestrian and bicycle connections to and across HST facilities will be analyzed. Detailed information and analysis of potential traffic impacts including impacts to pedestrian and bike facilities and feasible mitigation measures will be included in project-level EIR/EIS. (6) Cumulative potential traffic impacts due to the proposed project. Detailed information and analysis of impacts and feasible mitigation measures will be included in project-level EIS/EIR.

2.4 Revised Aesthetics and Visual Resources Analysis: San Jose to Gilroy

The following is a clarification of the aesthetics and visual resource analysis that resulted from the revised description of the alignment alternatives between San Jose and the Central Valley. This discussion adds to the 2008 Final Program EIR, Chapter 3.9, pages 3.9-19 through 3.9-23. The revised project description does not affect the conclusions in Chapter 3.9 of the 2008 Final Program EIR, that stated that the alignment alternatives would have potentially significant impacts on aesthetics from the introduction of the HST system into the visual landscape. Changes to text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with strikeout.

Regulatory Requirements and Methods of Evaluation (page 3.9-1)

No revisions or additions required.

Affected Environment (page 3.9-2)

No revisions or additions required.

Environmental Consequences, High-Speed Train Alternative (page 3.9-19)

San Jose to Central Valley Corridor

Visual Impacts

Implementation of HST in this corridor would require a dedicated pair of tracks. The corridor begins at Diridon station in San Jose. The HST would be accommodated by building a concourse and up to six HST tracks and three platforms above the existing platforms. The proposed platforms for HST would be located at 45 ft above grade. The platforms would extend more than 1,400 ft, with additional length at either end for the track fans (switches and trackwork to allow the two-track

mainline to serve all six station tracks). A canopy covering the HST platforms would extend the building height to 70 ft. The City of San Jose is planning for an intensification of land uses in and around the Diridon station, so the expanded HST station would constitute a medium visual impact, given that it would be a much longer and taller structure than the existing station building but in a setting that is proposed to have many larger buildings developed in the area.

The line would run on an elevated structure up to 45 ft tall until it crosses I-280, where it would descend to a retained fill section alongside the existing UPRR and Caltrain's Gilroy service. It would pass through a traditional small urban neighborhood before passing over SR-87 and ascending to an aerial alignment past the Tamien station. The retained fill and aerial sections would be a low visual impact on the surrounding landscape, creating shadow impacts on residential areas immediately adjacent to the right-of-way.

Just north of Almaden Expressway, the line returns to an at-grade alignment alongside the UPRR as it passes through the urban suburban landscape of South San Jose. A view of the current Caltrain/UPRR railway as it runs alongside Monterey Highway is provided in Figure 3.9-11—Caltrain/UPRR along Monterey Highway (Figure 2-1). The proposed configuration would continue all the way through Morgan Hill and Gilroy. New roadway grade separations would carry roadways either over or under the UPRR and HST tracks. Because the HST would be placed ~~in adjacent to~~ along an existing rail right-of-way corridor, the visual impact would be ~~low~~ medium (Table 2-5).

The traditional small urban community landscapes south of the highly urbanized San Jose area and through the small rural towns of Morgan Hill and Gilroy are characterized by mixed residential, commercial, and institutional uses in early to mid-20th century contiguous buildings, with average heights of 2 to 3 stories, minimal setbacks from streets, mature landscaping, and pedestrian-oriented streetscapes. Dominant visual features are historic architecture, mature street trees, and the surrounding distant mountainous ridgelines.

A station location option for the HST could be provided in either Morgan Hill or Gilroy. In either location, the station would consist of four tracks, two for non-stopping trains and two to serve outside platforms for stopping trains. At either location, Morgan Hill or the historic Gilroy station, the HST facilities would be elevated, and the visual impact would be medium.

South of Gilroy, the HST parallels the UPRR until Carnadero Junction, where it leaves the rail right-of-way to cross the valley towards San Felipe. The landscape is rural agricultural as the line crosses the Pajaro River and Tequisquita Slough and passes near San Eligo Lagoon. In this landscape, the line has a medium visual impact, introducing a new transportation corridor to a rural agricultural area.

Figure 2-1
Revised Figure 3.9-11—Caltrain/UPRR along Monterey Highway (May 2008)



Table 2-5
Revised Table 3.9.1—Visual Impacts Summary Data Table for
Alignment Alternatives and Station Location Option Comparisons

Corridor	Possible Alignment	Alignment	Change	Visual Impact Ranking	Alignment Visual Impact Ranking
San Jose to Central Valley: Pacheco Pass	1 of 1	Pacheco	Elevated facilities at Diridon San Jose station	Medium	Medium
			Elevated facilities south of Diridon station	Low and shadowing impacts	
			Highway grade separations	Low	
			Expansion of existing railway Addition of HST corridor adjacent to UPRR mainline right-of-way along Monterey Highway	Medium	
			New transportation corridor between Gilroy and Pacheco Valley	Medium	
			Elevated crossing of SR-152 in Pacheco Valley	High	
			Cut and fill sections over Pacheco Pass	Medium	
Station Location Options					
San Jose (Diridon)			Elevated concourse/platforms at San Jose Diridon station	Medium	
Morgan Hill (Caltrain)			Elevated station	Medium	
Gilroy (Caltrain)			Elevated station	Medium	

The coastal valley landscape consists of flat or rolling landscapes ringed with low hills and mountains in the background. Dominant visual elements are vistas of agricultural bottomland and wetlands framed by background views of green hills, ridges, and mountains.

At San Felipe, the line crosses SR-152 and enters a short tunnel to pass into the Pacheco Creek Valley. This is shown in the Final Program EIR in Figure 3.9-12—HST Crossing South of Gilroy. Once in the Pacheco Creek Valley, the line runs north of SR-152 along a series of cuts and fills until passing over the highway near Bell station.

The natural open space landscapes along SR-152 in Pacheco Creek Valley east of Gilroy are characterized by coastal mountains and mountain valley topography typified by rolling to steep-sloped grassland with shrubs, clusters of oaks and other native tree species, and wooded bottomland. Much of this area is part of the Henry Coe State Park and Mount Hamilton Project Area of The Nature Conservancy (described in Section 3.15, Biological Resources and Wetlands), which is designed to preserve the rich natural habitats in a 780-sq mi area of the Diablo Range. Small farms or ranches (in bottomlands), isolated roadside businesses (e.g., Casa de Fruta), and widely dispersed small communities characterize the landscape.

A simulation of the crossing of SR-152 in the Pacheco Creek Valley is provided in the Final Program EIR in Figure 3.9-13—HST Viaduct in Pacheco Creek Valley. South of the highway, the line would enter a series of tunnels and cut and fill sections, passing back to the north side of the highway in a cut just west of the pass. The line would curve north of the San Luis Reservoir and Cottonwood Bay, again partially in tunnels and partially on cut and fill sections. The visual impact of this section of the line over the pass varies from none where the line is in a tunnel, to a medium impact where there are deep cuts or fills, to a high impact where the line crosses above the highway on a viaduct. North of San Luis Reservoir, the line can diverge to one of three alignment alternatives: GEA North, Henry Miller (UPRR Connection), and Henry Miller (BNSF Connection).

The GEA North alignment alternative would cross Romero Creek and enter a series of tunnels and cut and fill sections to reach the edge of the Central Valley near the Pat Brown Aqueduct and I-5. It would turn north on an embankment to pass around the town of Gustine. The landscape transitions from the parks and open space of the Pacheco Pass to the rural agriculture of the western Central Valley. This would have a high visual impact where it crosses I-5. It would introduce a new transportation infrastructure crossing from the hills to the valley on an embankment over the freeway. I-5 in this area is a designated state scenic highway.

Passing west and north of Gustine, the line would turn toward the east and run north of SR-140. Landscape in this area is a mixture of rural agriculture and wetlands open space. The line passes near the Great Valley Grasslands State Park and the Fremont Ford State Recreation Area. It would cross wetlands on low-level elevated structures. The introduction of the HST to the open space and parklands would be a medium visual impact because the line would be low to the ground and blend with the horizontal landscape.

The GEA North alignment alternative would continue across the rural agricultural landscape of the Central Valley to meet the Central Valley BNSF mainline between the communities of Atwater and Merced. As the line approaches the urbanized area, the landscape shifts to a mix of urban suburban and rural agricultural.

The GEA North alignment alternative would split south of Livingston and curve to the north, eventually parallel to Arena Way. The introduction of the railway to a new alignment across the agricultural landscape would have a low visual impact. Near the existing BNSF railway, the line would cross the Merced River on a new alignment. This new river crossing would have a medium visual impact to the riparian landscape along the river.

Both the BNSF and UPRR Henry Miller alignment alternatives would run across the Central Valley just north of Henry Miller Avenue. The line would exit the hills east of Pacheco Pass and follow Romero Creek. This takes the line past the San Joaquin National Cemetery in a trench, where the line would have a medium visual impact, introducing a major transportation facility to an open landscape designated for reflection and quiet. This area is shown in the Final Program EIR in Figure 3.9-14—Romero Creek from San Joaquin National Cemetery. The alignment alternative would also pass the O'Neill Forebay of the California Aqueduct and the San Luis Reservoir State Recreation Area.

The line would pass through the roadside community of Santa Nella and cross I-5, which is a designated state scenic highway in this area. The impact of the highway crossing is low because the railway crosses in an area where the landscape comprises highway-commercial uses and an existing roadway overcrossing.

East of Santa Nella, the line would traverse a landscape of rural agriculture and wetlands open space, including a number of state and federal wildlife areas. The alignment alternative would be placed on a low structure to cross the wetland areas. A simulation of this is shown in the Final Program EIR in Figure 3.9-15—HST Viaduct along Henry Miller Avenue. The introduction of the HST to the open

space and parklands would be a medium visual impact because the line would be low to the ground and would blend with the horizontal landscape. The line would be visible from the Volta Wildlife Area and Los Banos Wildlife Area.

West of the city of Chowchilla, the Henry Miller (UPRR Connection) and Henry Miller (BNSF Connection) alignment alternatives would partially split. The leg connecting to the UPRR northbound would turn north from the alignment and cross agricultural lands to meet the Central Valley UPRR N/S alignment alternative north of the city of Chowchilla. The Henry Miller (UPRR Connection) southbound leg would continue east before turning south to meet the Central Valley UPRR N/S alignment alternative near the town of Fairmead. This alignment alternative, both the north and south legs, would have a low visual impact because it would run at grade.

The Henry Miller (BNSF Connection) alignment alternative would pass to the south of the city of Chowchilla. After crossing SR-99, the line divides into two legs to connect with the Central Valley HST line (BNSF alignment alternative) near the Valley State Prison for Women. The two legs would have a low visual impact because they would run at grade.

Historic Buildings, Neighborhoods, Landscapes

In San Jose, the HST is to be accommodated at the Diridon station by building a concourse and up to six HST tracks and three platforms above the existing platforms. The San Jose Diridon station is a designated historic property listed on the National Register of Historic Places. The station dates to 1935, with architectural features characteristic of that period. The proposed platforms for the HST would be located at 45 ft above grade. The platforms would extend more than 1,400 ft, with additional length at either end for the track fans (switches and trackwork to allow the two-track mainline to serve all six station tracks). A canopy covering the HST platforms would extend the building height to 70 ft. The City of San Jose is planning an intensification of land uses in and around the Diridon station, so the expanded HST station location option would constitute a medium visual impact, given that it would be a much longer and taller structure than the existing station building but in a setting that is proposed to have many larger buildings developed in the area.

The San Jose to Central Valley corridor south of the urbanized areas of San Jose traverses a largely rural and agricultural landscape. Historic buildings, like the 21-Mile House in Morgan Hill, no longer exist. The Gilroy Caltrain station would be visually affected by the HST, but the impact can be minimized through careful and thoughtful design. The traditional small town landscape present at the core of Morgan Hill and Gilroy has coexisted with the railway for all of their histories. The visual impact of the HST project is medium, compared with the contrast of recent commercial and residential suburban growth.

In this corridor, most of the visual impact would be from adding new transportation infrastructure into an undeveloped rural landscape. The historic character of Monterey Highway, immediately adjacent to the UPRR and proposed HST alignment, would be affected by the removal of mature trees (including the Keesling Shade Trees discussed below in Section 2.5) that visually separate the highway from the railroad. This is shown in the context of the urban suburban landscape of South San Jose in Figure 3.9-10. In many places, the trees are denser and older than the surrounding landscape. Their removal to expand the rail corridor to accommodate HST would have a medium visual impact on the views along much of the Monterey Highway.

To pass from the UPRR right-of-way to the SR-152 corridor, the HST would develop a new transportation corridor across agricultural and open space, not aligned with any existing grid of roads or natural features. This would have a medium visual impact on the existing landscape, but that impact can be lessened by keeping the HST at grade and planting native flora along the right-of-way.

Through the Pacheco Creek Valley, the railway would follow the existing highway corridor. The major visual landmarks along the highway, such as Elephant Head (a large rock outcropping), would not be visually affected by the railway. As the valley narrows, the railway would be mostly out of sight, running in tunnels.

East of Pacheco Pass, the HST would follow Romero Creek past the San Joaquin Valley National Cemetery. The alignment would be in trench as it passes the cemetery, crossing northeast of the entry road to the cemetery. This would have a medium visual impact on the landscape and the cemetery's remote and quiet setting.

The three alignment alternatives across the valley would pass through similar landscapes, including grasslands and wetlands. The HST infrastructure would have an impact on these open landscapes, but the impact can be minimized by running at grade and planting native flora along the line.

Affected Views from State Scenic Highways

There are a number of state scenic highways in the corridor. Designated state scenic highways, as of November 2006, include I-5 in Stanislaus County and north of SR-152 in Merced County and SR-152 in Merced County west of I-5. State highways eligible but not officially designated as scenic include SR-152 in Santa Clara County east of SR-156. All of these highways, both designated and eligible, are considered in this analysis.

The crossing of I-5 could take place in one of two locations. The GEA North alignment alternative would create a high visual impact because it would take place in an open landscape where the elevated crossing would be visible from a great distance along the freeway. The Henry Miller alignment alternatives would cross at an existing roadway overcrossing in the highway-commercial landscape of Santa Nella. This crossing would have a low visual impact because the landscape is dominated by the existing highway overcrossings and the commercial landscape along the freeway.

The line would be visible from many points along SR-152 in Santa Clara and Merced County, especially in the Pacheco Creek Valley. The visual impact of the line would vary from low to high, relative to the specific location. Where the line parallels the highway, it would have a low visual impact, with hills continuing to dominate the landscape. At the locations where the line passes over the highway, the elevated crossing would dominate the view from the highway, having a high visual impact. In other locations, where the railway runs on a high fill, the line would have a medium visual impact, lessening over time as the embankment is engulfed by the local flora.

Photo Simulations of Alternatives in Selected Scenic Areas (page 3.9-36)

No revisions or additions required.

CEQA Significance Conclusions and Mitigation Strategies (page 3.9-36)

No revisions or additions required.

Design Practices (page 3.9-37)

No revisions or additions required.

Subsequent Analysis (page 3.9-38)

No revisions or additions required.

2.5 Revised Cultural Resources and Paleontological Resources Analysis: San Jose to Gilroy

The following is additional cultural resource analysis that resulted from the revised description of the alignment alternatives between San Jose and the Central Valley. This discussion adds to the 2008 Final Program EIR, Chapter 3.12, pages 3.12-5, 3.12-10, 3.12-18, and 3.12-27. Changes to text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with strikethrough.

Regulatory Requirements and Methods of Evaluation, Historic-era Properties and Historical Resources (page 3.12-5)

The method used to predict potential effects and impacts of the alignment alternatives on Heritage Trees is based on a field review of trees occurring in the proposed alignment and general observation of the condition of the trees. (ICF 2009.)

Affected Environment, Historic-era Properties and Historical Resources (page 3.12-10)

By far, the largest concentrations of historic buildings, structures, objects, sites, districts, and cultural landscapes (or potential historic properties/historical resources) in this region are in the urban centers of San Jose, San Francisco, and Oakland, but resources of all types appear throughout the region. A certain number of properties/resources appear in other towns, and to a lesser extent, in the rural countryside of the Santa Clara and Central valleys. Towns that were important local trade centers in the late nineteenth century, like Stockton and Merced, exhibit concentrations of historical resources along the project alignment alternatives. Rural historic properties and historical resources that appear along the HST Alignment Alternatives include farm and ranch complexes and infrastructure elements (such as water conveyance systems, bridges, industrial complexes, and rail stations). Other rural elements include trees planted along transportation routes such as a group of California black walnut (*Juglans californica*, also referred to as *Juglans hindsii*) trees located along Monterey Highway that may qualify as "Heritage Trees" as designated by the Santa Clara County Historical Heritage Commission. The Heritage Trees, also known as "Keesling's Shade Trees," were planted along Monterey Highway during the early 20th Century, by traveler Horace G. Keesling between 1900 and 1911 (Santa Clara County 1998, Hatch 2007, California Parks 2009, ECV1850 Plaque 2010).

Environmental Consequences, High-Speed Train Alternative (page 3.12-18)

San Jose to Central Valley Corridor

Pacheco Alignment Alternative

This alignment alternative roughly follows Highway 152 through the Pacheco Pass. Little development has taken place in this area. In total, five recorded architectural and historic resources were found to be located within the project APE (Table 2-6). Of these, two are historic canals, ~~and~~ one is a bridge, and one is the group of black walnut trees (Keesling's Shade Trees) occurring along the alignment alternative adjacent to Monterey Highway. The black walnut trees were listed as a State of California Point of Historical Interest in 1985. There are also likely historic resources in the Santa Clara Valley, including Morgan Hill and Gilroy. Seven previously recorded archaeological resources are located within the APE. Three of them are small prehistoric sites that typically include midden and lithic debitage. Though little archaeological work has been conducted in this area, it is known to be highly sensitive for prehistoric archaeological resources. Overall, this alignment alternative has medium sensitivity for cultural resources. No traditional cultural properties were identified within the APE.

Table 2-6
Revised Table 3.12-1—Cultural Resources Summary Data Table for
Alignment Alternatives and Station Location Option Comparisons

Corridor	Possible Alignments	Alignment	Number of Recorded Archaeological Resources	Number of Recorded Architectural/ <u>Historic</u> Resources	Traditional Cultural Properties	Cultural Resources Ranking (High, Medium, Low)	Paleontology Sensitivity (High, Medium, Low)
San Jose to Central Valley: Pacheco Pass	1 of 1	Pacheco	7	4-5	No	Medium (<u>heritage trees</u>)	Low
San Jose (Diridon)			0	1	No	Medium	Low
Morgan Hill (Caltrain)			0	0	No	Low	Low
Gilroy (Caltrain)			0	0	No	Low	Low

This alignment alternative extends through areas mapped as Franciscan ultramafic rocks and Quaternary terrace and alluvium, all ranking low in paleontological sensitivity. A portion of the alignment alternative near Gilroy passes through Plio-Pleistocene alluvial deposits similar to those which have yielded vertebrate fossils elsewhere and is assigned high sensitivity. The remaining portion falls on nonsensitive lower and upper Cretaceous marine rocks. Overall, this alignment alternative was identified to have a low sensitivity for paleontological resources.

San Jose to Central Valley Corridor Station Location Options: Only the San Jose Diridon station location option within this corridor has a recorded architectural resource that is within the APE or directly adjacent to the APE. No traditional cultural properties were identified within the APE.

The overall paleontological sensitivity for each of the station location options is low. Specific impacts to paleontological resources associated with construction of the station location options require additional information concerning exact locations and subsurface geology. Additional paleontological resources assessment would take place at the project level after the station designs are more fully defined.

This alignment alternative extends through areas mapped as Franciscan ultramafic rocks and Quaternary terrace and alluvium, all ranking low in paleontological sensitivity. A portion of the alignment alternative near Gilroy passes through Plio-Pleistocene alluvial deposits similar to those which have yielded vertebrate fossils elsewhere and is assigned high sensitivity. The remaining portion falls on nonsensitive lower and upper Cretaceous marine rocks. Overall, this alignment alternative was identified to have a low sensitivity for paleontological resources.

San Jose to Central Valley Corridor Station Location Options: Only the San Jose Diridon station location option within this corridor has a recorded architectural resource that is within the APE or directly adjacent to the APE. No traditional cultural properties were identified within the APE.

The overall paleontological sensitivity for each of the station location options is low. Specific impacts to paleontological resources associated with construction of the station location options require additional information concerning exact locations and subsurface geology. Additional paleontological resources assessment would take place at the project level after the station designs are more fully defined.

Conclusion (page 3.12-25)

No revisions or additions required.

Design Practices (page 3.12-25)

No revisions or additions required.

Mitigation Strategies and CEQA Significance Conclusions, Historic Properties/Resources
(page 3.12-27)

The Keesling's Shade Trees are a California Point of Historical Interest, which would qualify them as a historical resource under CEQA, and the removal of the trees for HST construction would be considered a significant impact. For the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act, an evaluation would be made about whether or not the trees are eligible for the National Register of Historic Places, and gain State Historic Preservation Office (SHPO) concurrence with that finding. Because the trees are a linear resource with gaps, they would be evaluated as a historic district; however, certain segments may lack the necessary integrity to be National Register eligible. If a grouping or groupings are found eligible for the National Register, an analysis would be conducted to determine whether the project would have an adverse effect (36 CFR § 800.5). If adverse, Section 106 would require SHPO consultation to mitigate the effects. Mitigation might be avoidance through project design, or possibly filling in gaps where specimens have died or are dying that are avoided by the project, in exchange for the removal of specimens in the way of the project.

Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce the impact for the removal of these trees to a less-than-significant level. This document therefore concludes that the impacts on the Keesling Shade Trees may be significant, even with the application of mitigation strategies.

Subsequent Analysis (page 3.12-29)

No revisions or additions required.

2.6 Revised Appendix 2-D Plan and Profiles: Pacheco Pass Alignment

Plan and profile sheets for the Pacheco Pass Alignment between San Jose and Gilroy and contained in Appendix 2-D of the 2008 Final Program EIR have been revised. The replacement pages for 2-D-25, 2-D-26, 2-D-27, 2-D-28, and 2-D-29 are provided as Figure 2-2.

2.7 Revised Appendix 2-E Cross Sections: San Jose to Central Valley

Cross sections for the San Jose to Central Valley Corridor and contained in Appendix 2-E of the 2008 Final Program EIR have been revised as Figure 2-3. The replacement pages listed below are provided following this section:

- Figure PP-S1 on page 2-E-63.
- Figure PP-S2 on page 2-E-64.

- Figure PP-6 on page 2-E-53.
- Figure PP-7 on page 2-E-54.
- Figure PP-8 on page 2-E-55.
- Figure PP-9 on page 2-E-56.
- Figure PP-10 on page 2-E-57.
- Figure PP-11 on page 2-E-58.
- Figure PP-12 on page 2-E-59.
- Figure PP-13 on page 2-E-60.
- Figure PP-14 on page 2-E-61.

FIGURE 2-2 PLAN & PROFILES

Figure Name

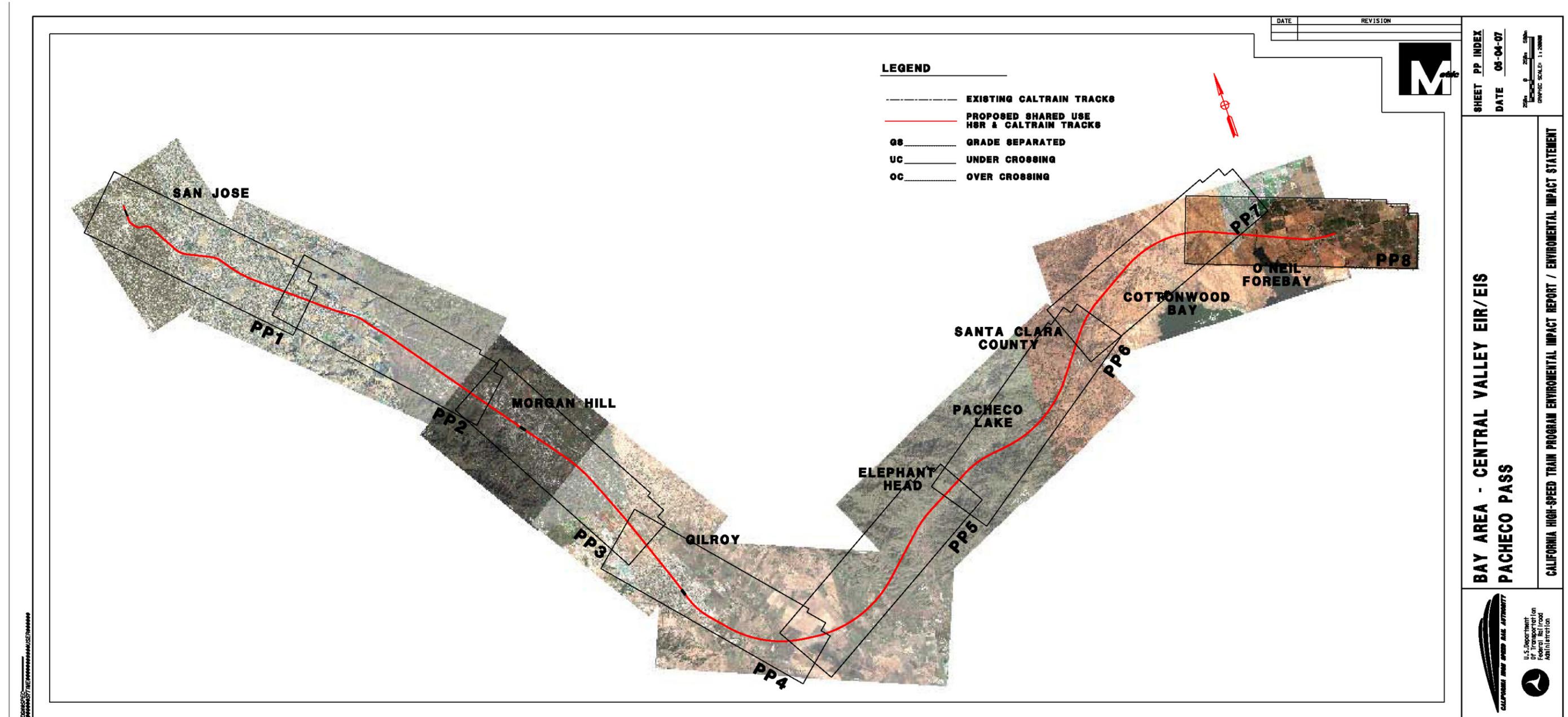
PP Index Pacheco Pass Plan & Profiles: Page 2-D-25

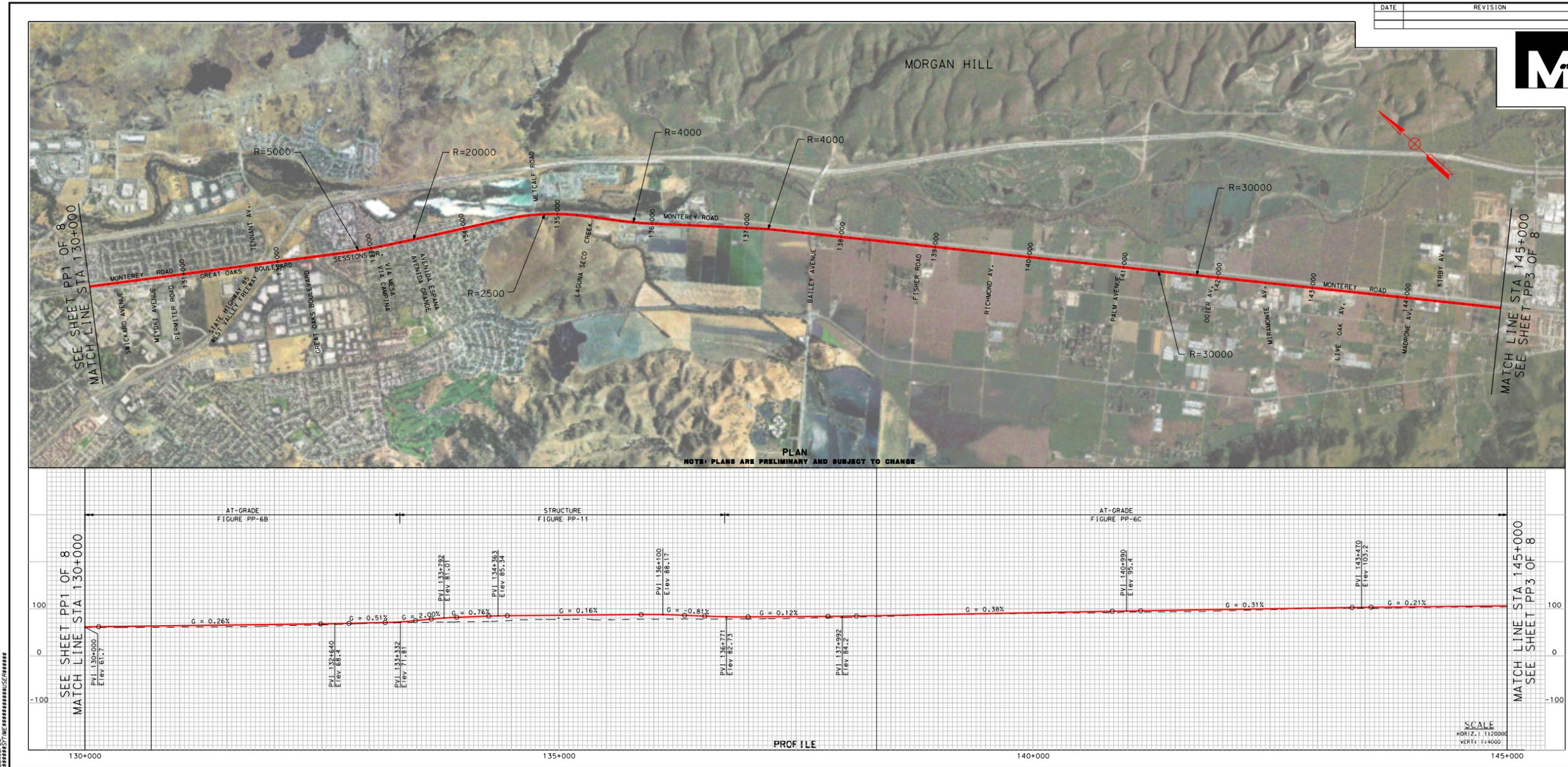
PP1 of 8 Pacheco Pass Plan & Profiles: Page 2-D-26

PP2 of 8 Pacheco Pass Plan & Profiles: Page 2-D-27

PP3 of 8 Pacheco Pass Plan & Profiles: Page 2-D-28

PP4 of 8 Pacheco Pass Plan & Profiles: Page 2-D-29





DATE	REVISION

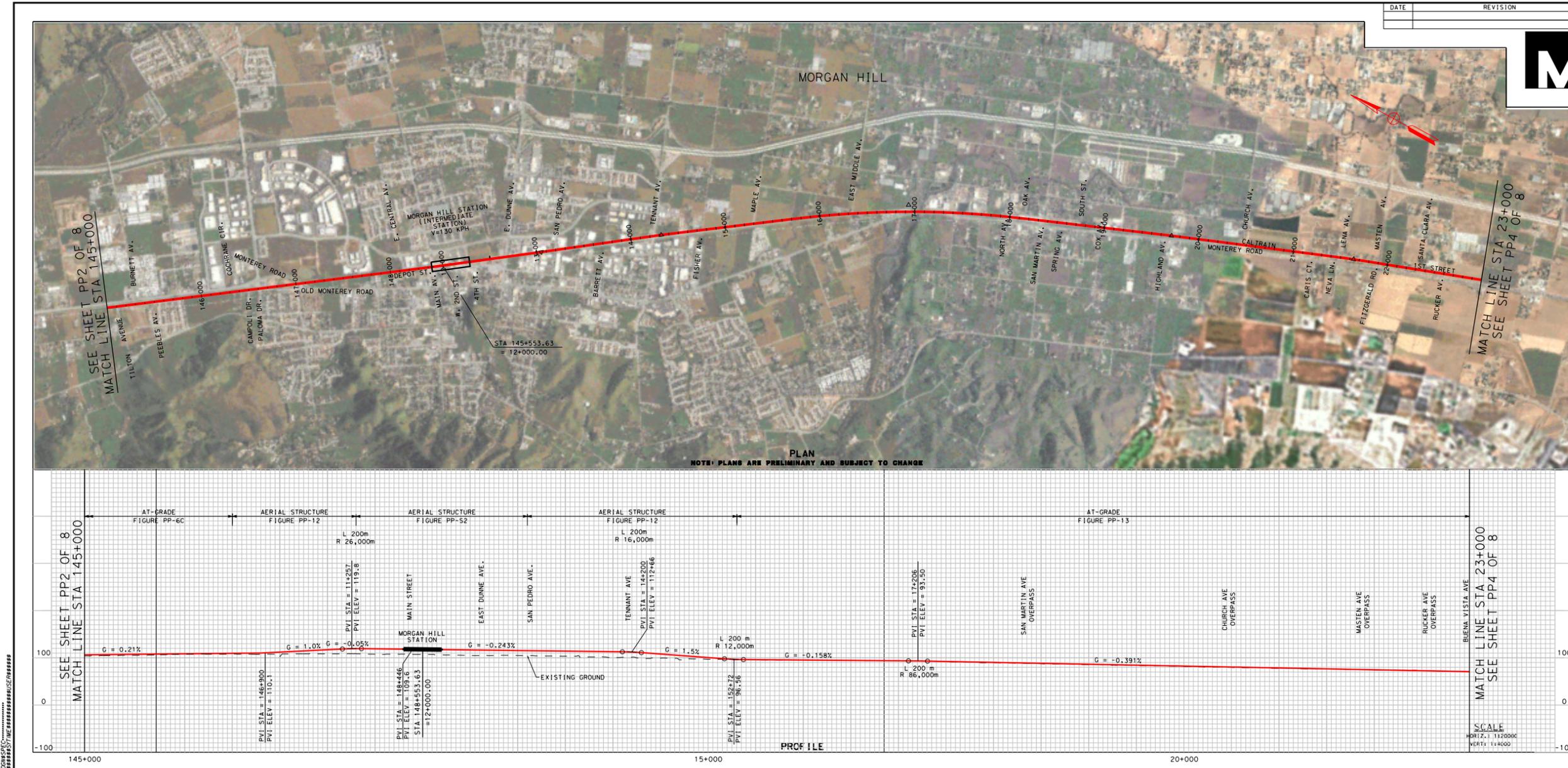


SHEET PP2 OF 8
REVISED DRAFT 1
DATE 10-12-09
GRAPHIC SCALE: 1"=2000'

**BAY AREA - CENTRAL VALLEY EIR/EIS
PACHECO PASS**

CALIFORNIA HIGH-SPEED TRAIN PROGRAM ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL IMPACT STATEMENT





DATE	REVISION



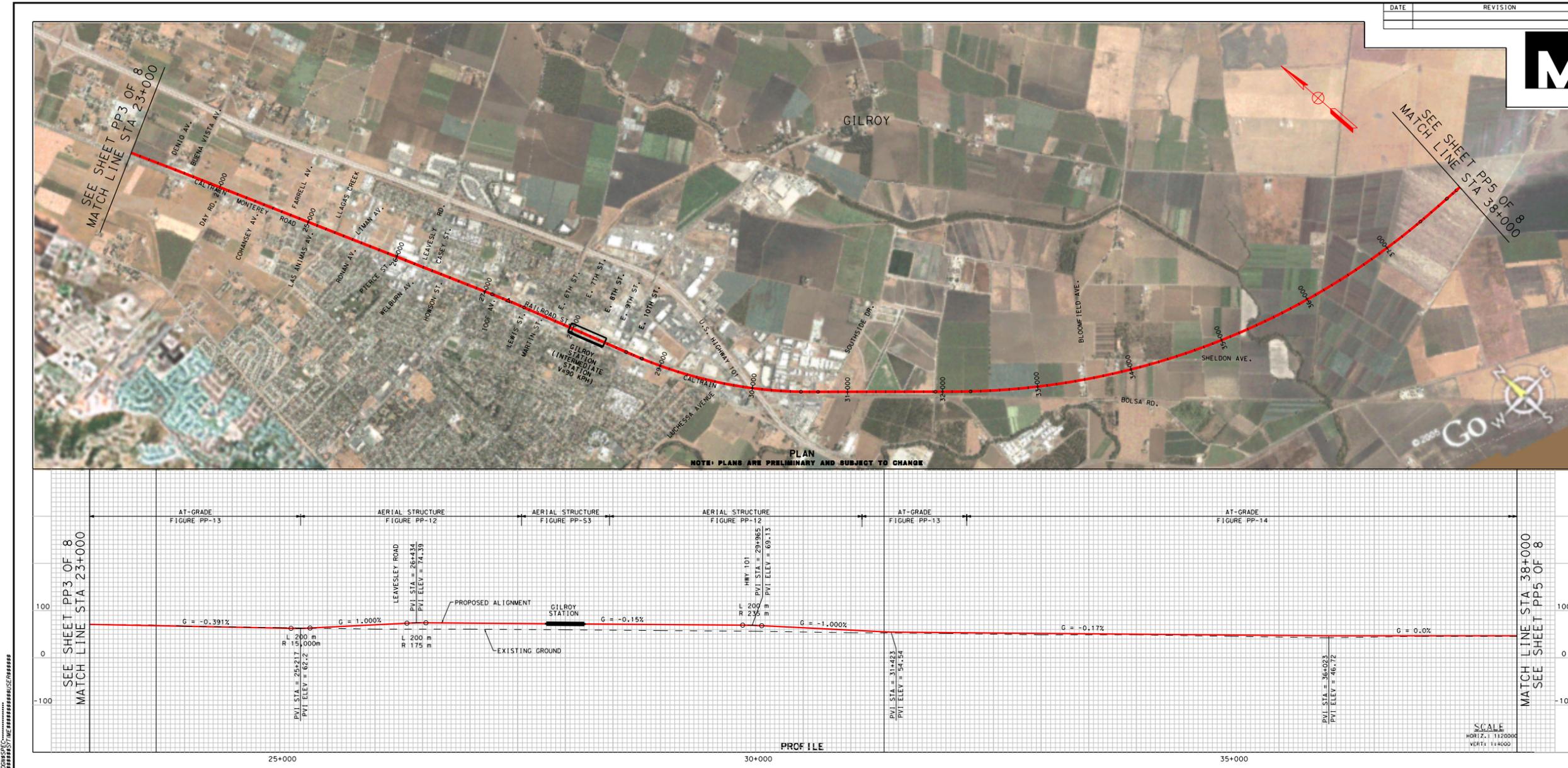
SHEET PP3 OF 8
REVISED DRAFT 1
DATE 10-12-09

GRAPHIC SCALE: 1:20000

**BAY AREA - CENTRAL VALLEY EIR/EIS
PACHECO PASS**

CALIFORNIA HIGH-SPEED TRAIN PROGRAM ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL IMPACT STATEMENT





DATE	REVISION



SHEET PP4 OF 8
REVISED DRAFT 1
DATE 10-12-09
GRAPHIC SCALE: 1"=2000'

**BAY AREA - CENTRAL VALLEY EIR/EIS
PACHECO PASS**

CALIFORNIA HIGH-SPEED TRAIN PROGRAM ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL IMPACT STATEMENT

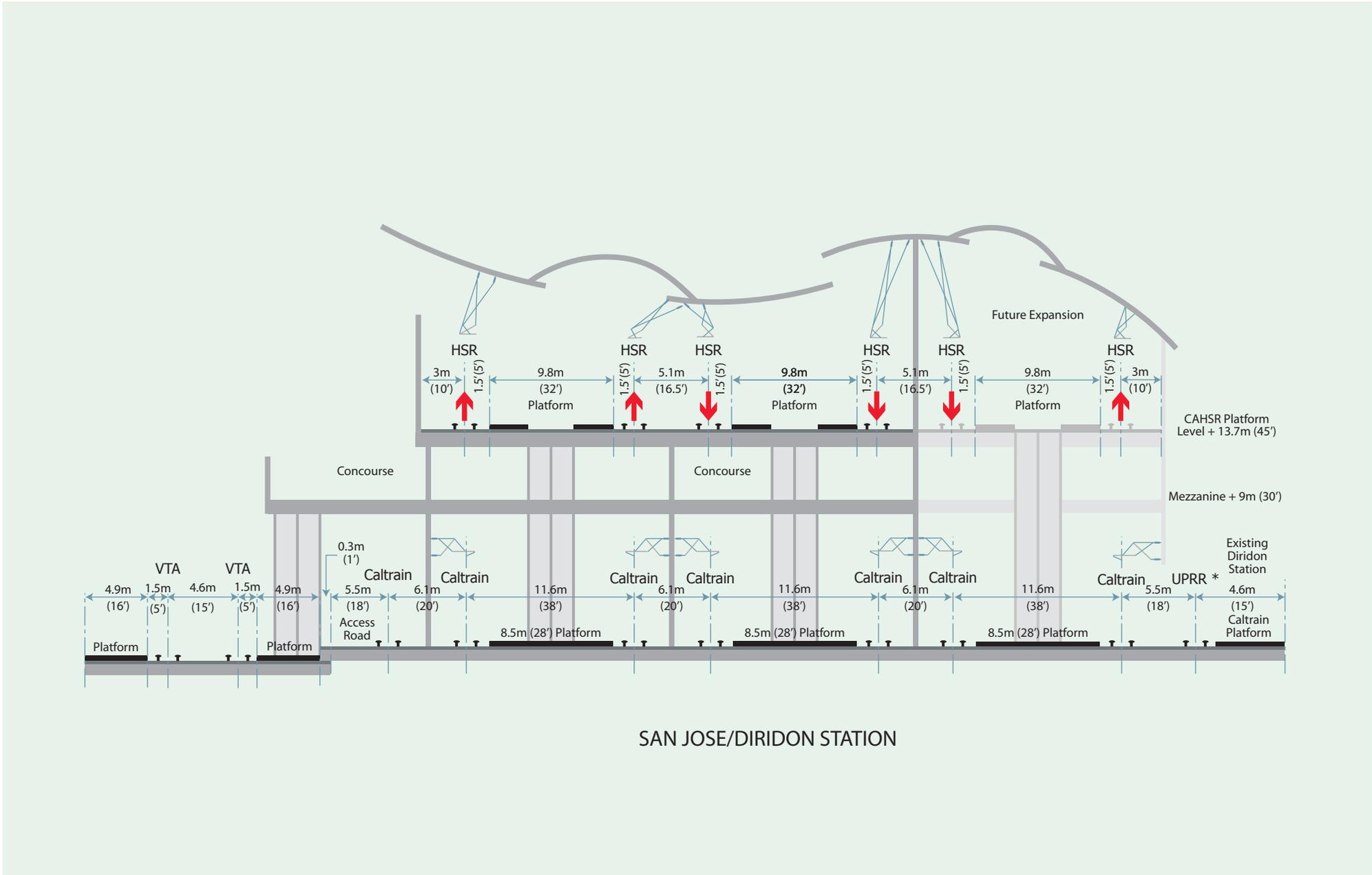


SCALE
HORIZ. 1"=1000'
VERT. 1"=4000'

FIGURE 2-3 CROSS SECTIONS: PACHECO PASS

Figure Name

PP-S1	Pacheco Pass: Dirdon Station
PP-S2	Pacheco Pass: Typical Intermediate Station on Aerial Structure
PP-S3	Pacheco Pass: Typical Intermediate Station on Aerial Structure
PP-6A	Pacheco Pass: Typical At-Grade Section
PP-6B	Pacheco Pass: Typical At-Grade Section
PP-6C	Pacheco Pass: Typical At-Grade Section
PP-7	Pacheco Pass: Aerial Station
PP-8	Pacheco Pass: Aerial Structure
PP-9A	Pacheco Pass: Typical Retaining Fill
PP-9B	Pacheco Pass: Typical Retaining Fill
PP-10	Pacheco Pass: Aerial Structure
PP-11	Pacheco Pass: Aerial Structure
PP-12	Pacheco Pass: Aerial Structure
PP-13	Pacheco Pass: Typical At-Grade Section
PP-14	Pacheco Pass: Typical At-Grade Mainline Section (Undeveloped Areas)



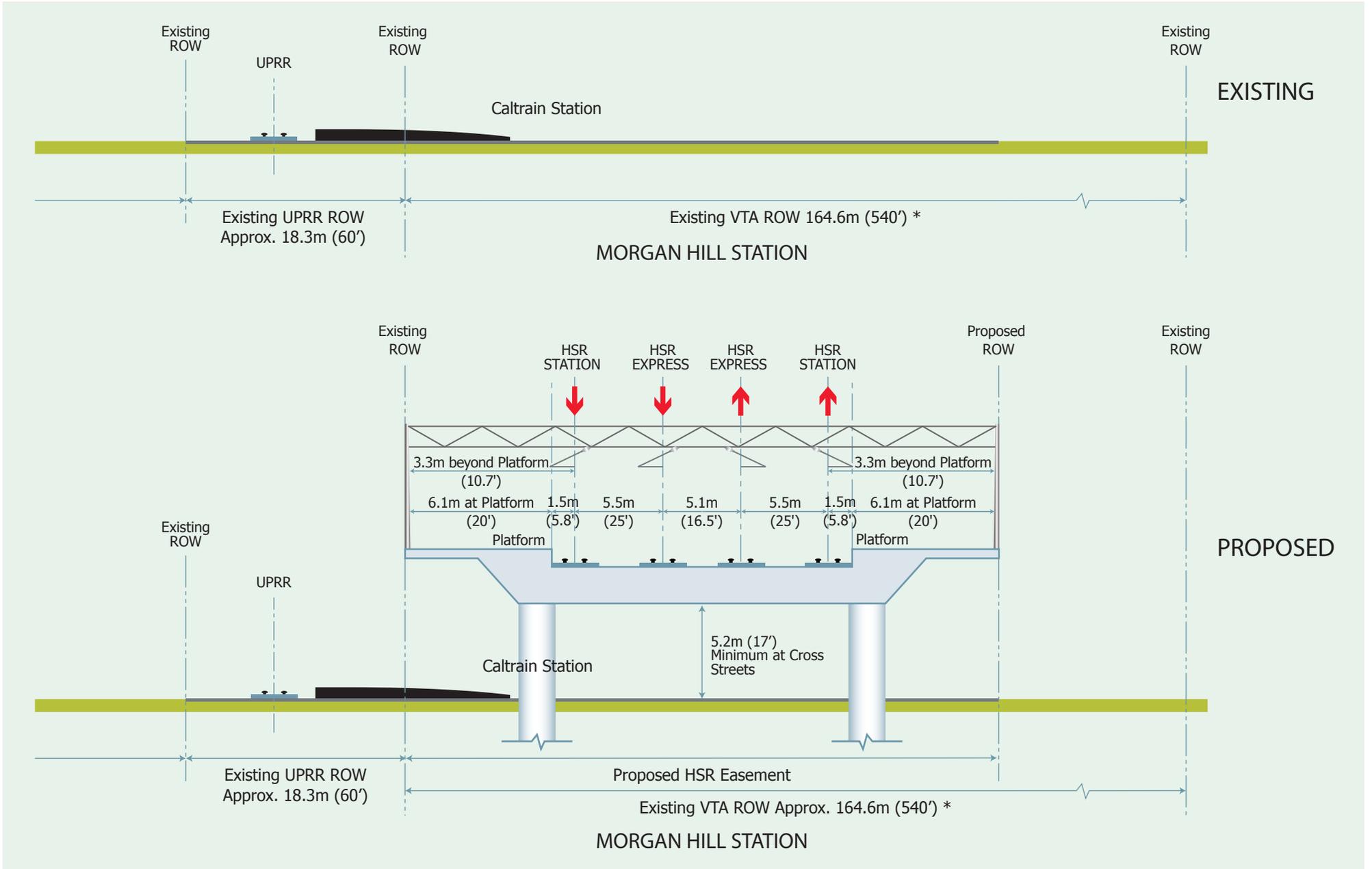
SAN JOSE/DIRIDON STATION

Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights

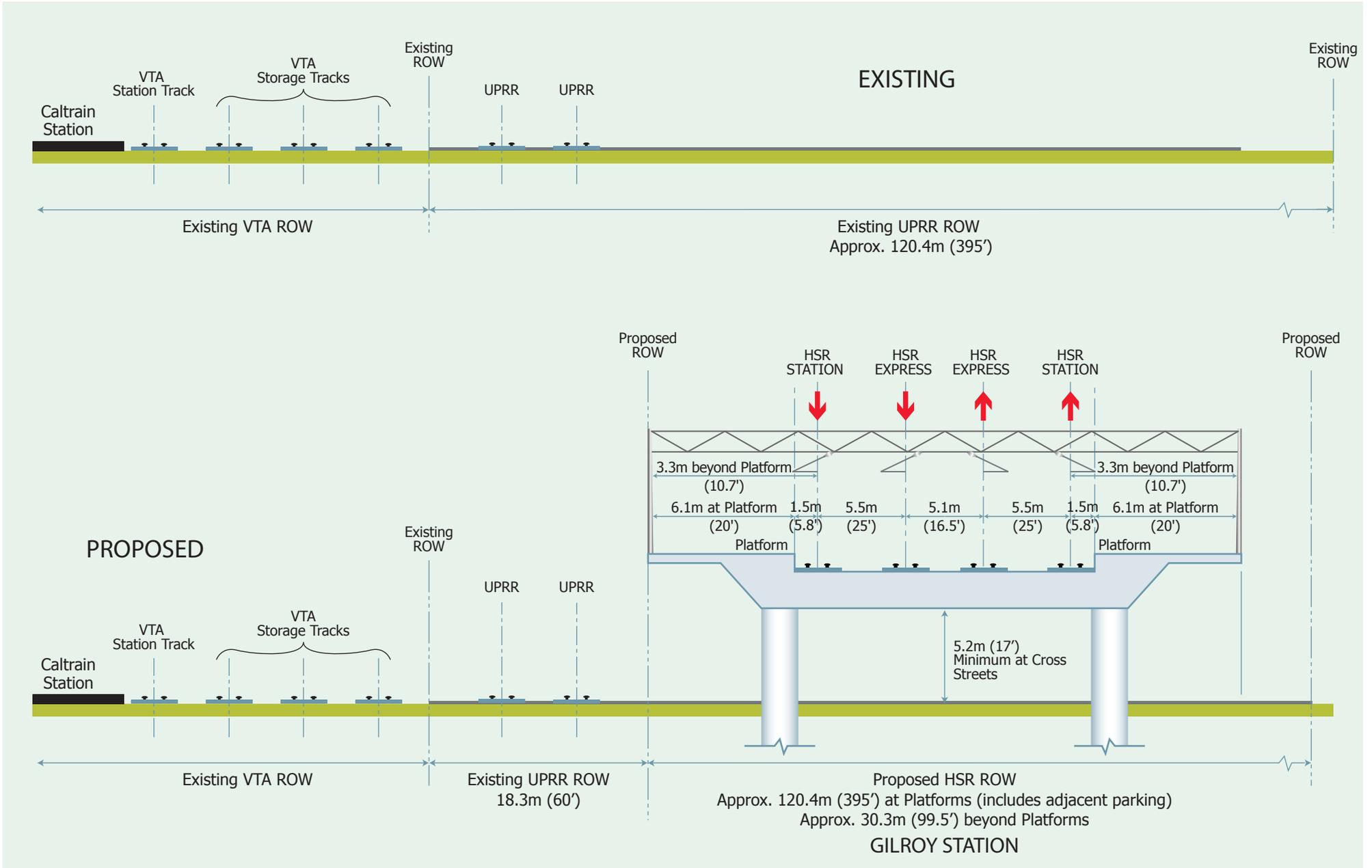
**San Jose to Los Banos
Pacheco Pass
San Jose/Diridon Station**

Figure PP-S1



Future Caltrain
Electrification Not Shown

* Private Property Outside Station Limits

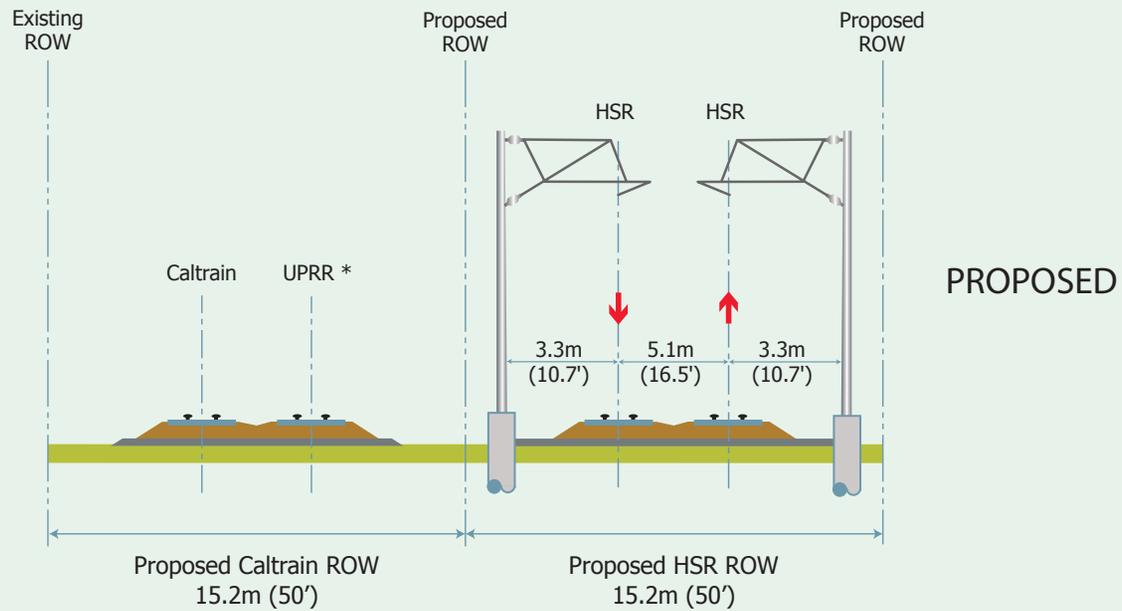
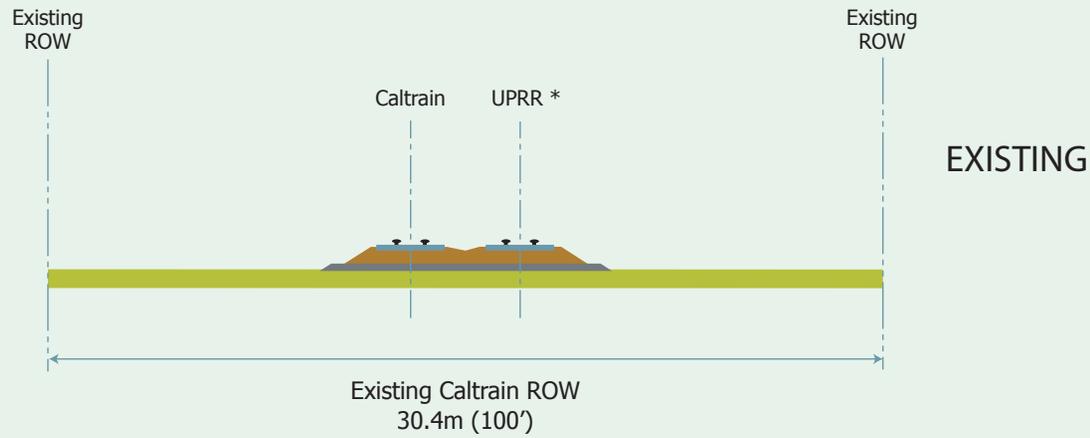


Future Caltrain
Electrification Not Shown

California High-Speed Train Program EIR/EIS

**San Jose to Los Banos
Pacheco Pass
Typical Intermediate Station on Aerial Structure**

Figure PP-S3



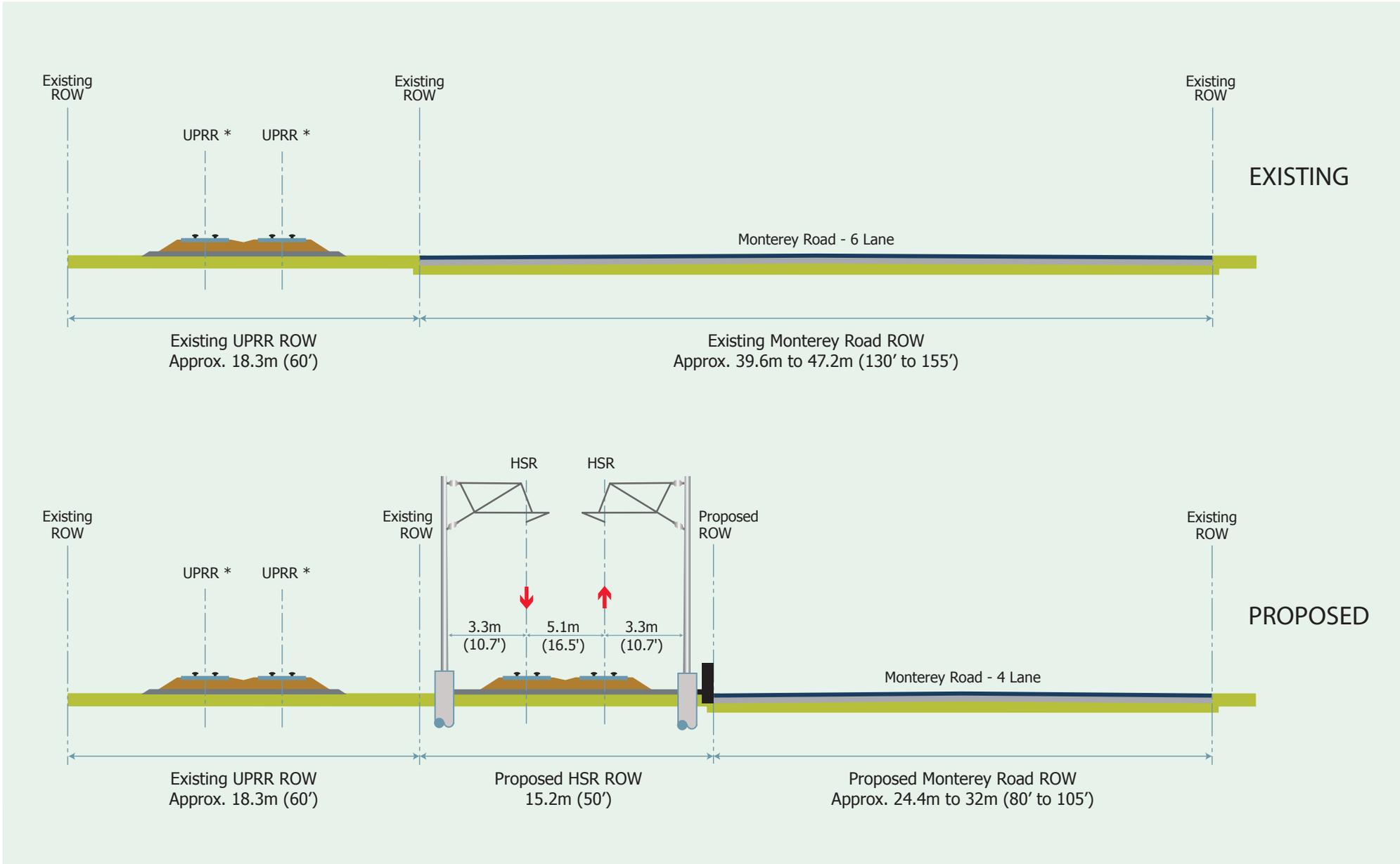
Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights

California High-Speed Train Program EIR/EIS

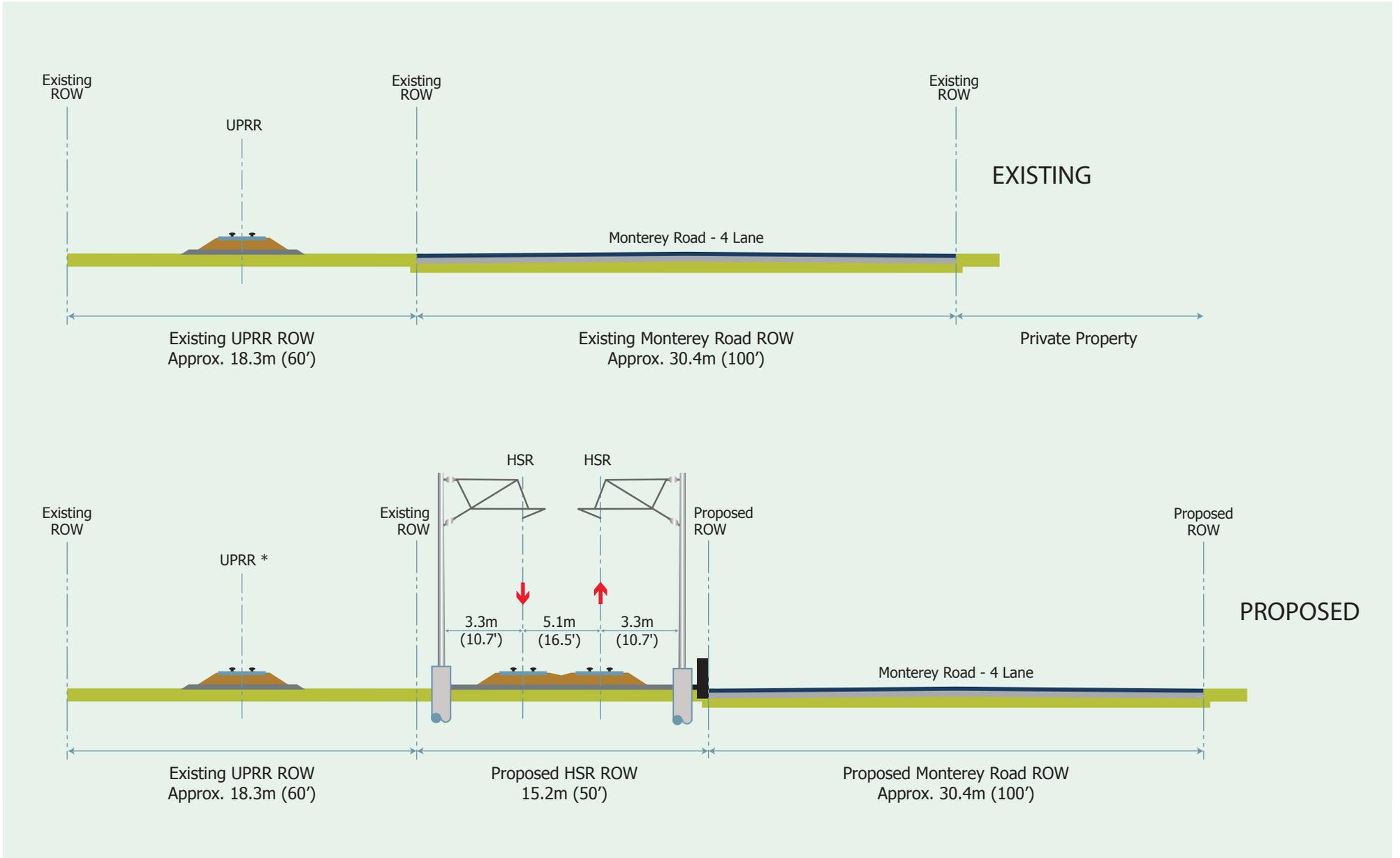
**San Jose to Los Banos
Pacheco Pass
Typical At-Grade Section**

Figure PP-6A



Future Caltrain
 Electrification Not Shown

* Caltrain operates on these tracks via track rights

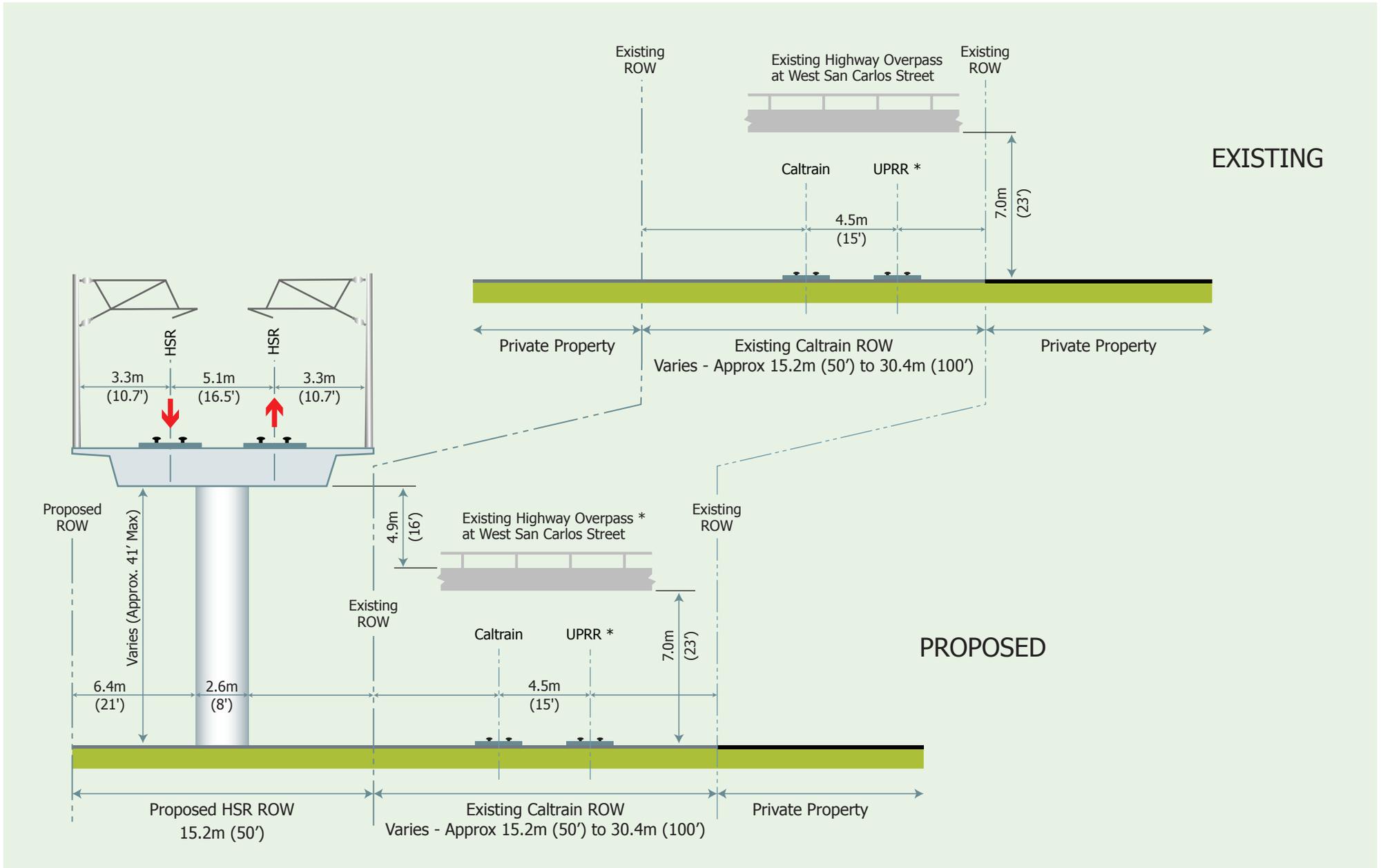


California High-Speed Train Program EIR/EIS

* Caltrain operates on these tracks via track rights

**San Jose to Los Banos
Pacheco Pass
Typical At-Grade Section**

Figure PP-6C



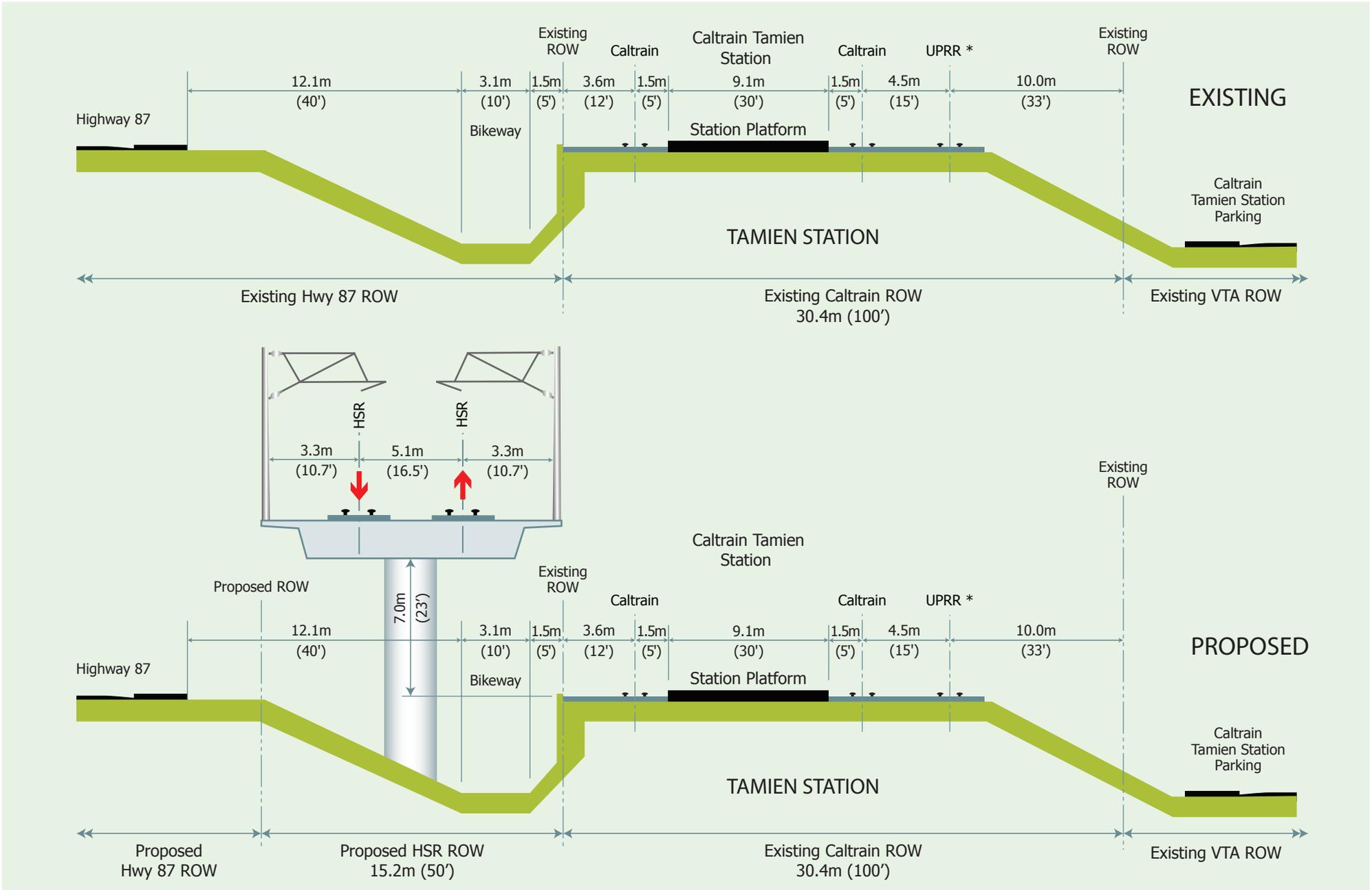
California High-Speed Train Program EIR/EIS

Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights

**San Jose to Los Banos
Pacheco Pass
Aerial Structure**

Figure PP-7



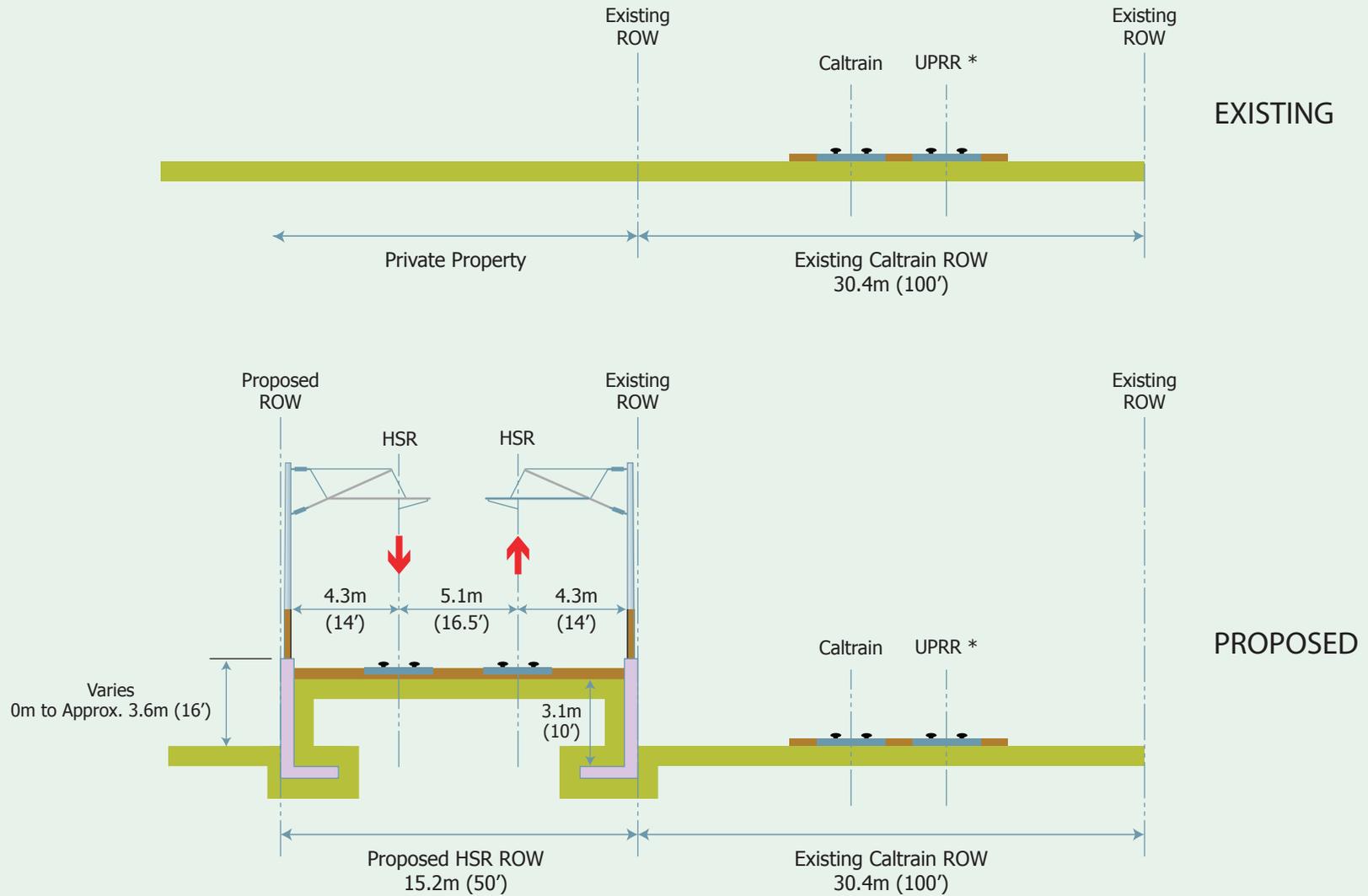
Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights

California High-Speed Train Program EIR/EIS

**San Jose to Los Banos
Pacheco Pass
Aerial Structure**

Figure PP-8



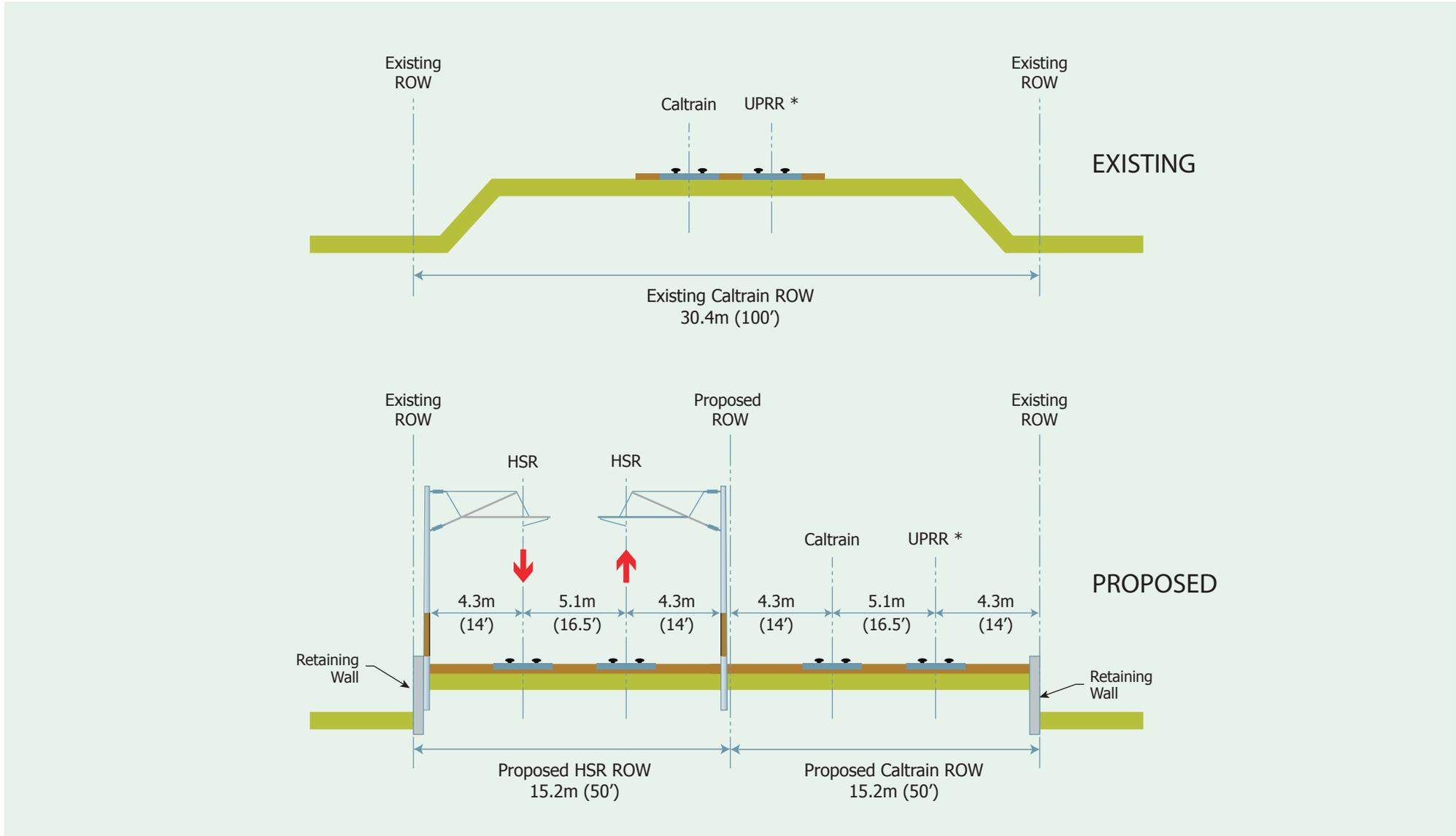
California High-Speed Train Program EIR/EIS

Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights

**San Jose to Los Banos
Pacheco Pass
Typical Retained Fill**

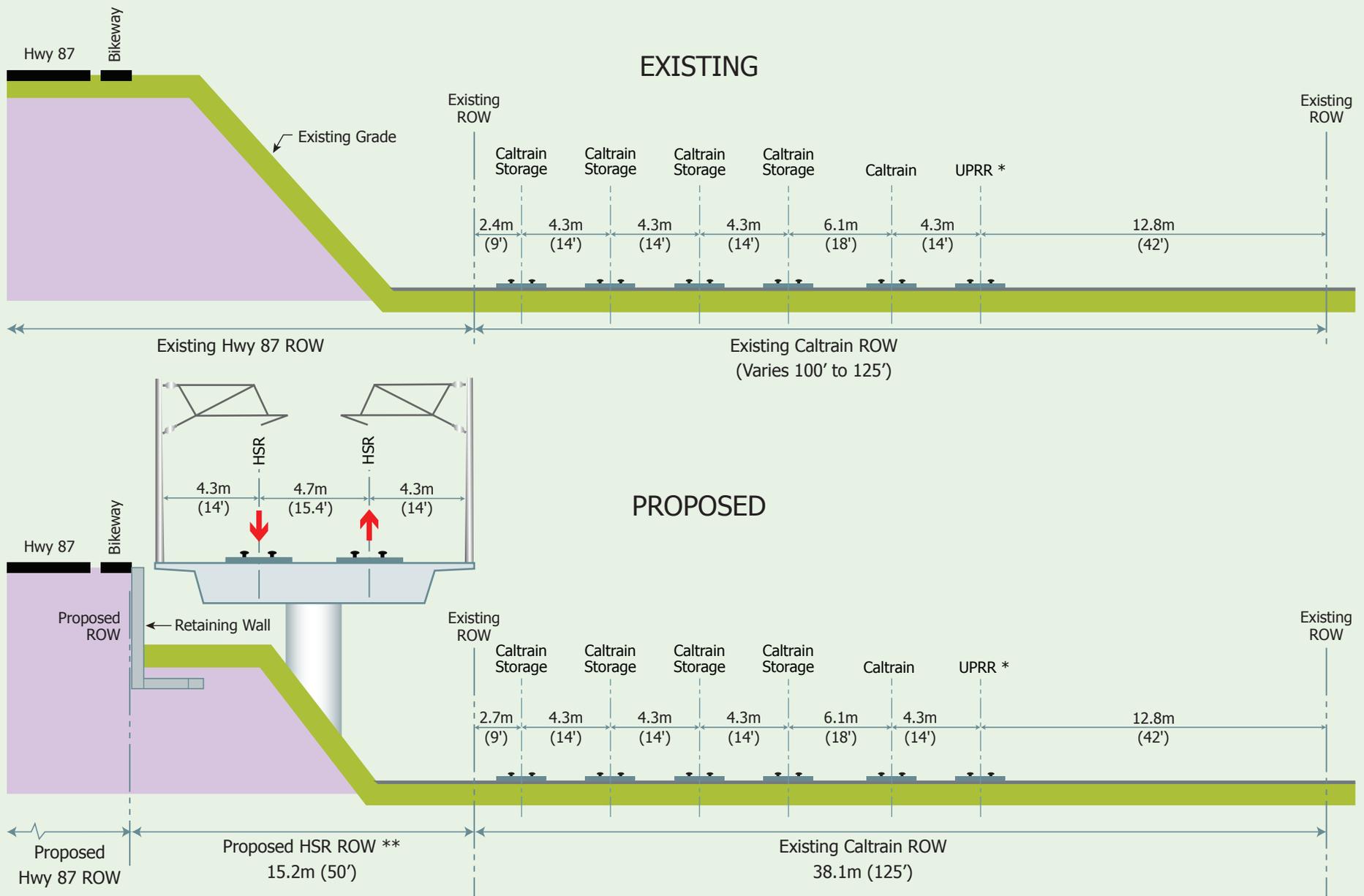
Figure PP-9A



California High-Speed Train Program EIR/EIS

Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights



Future Caltrain
Electrification Not Shown

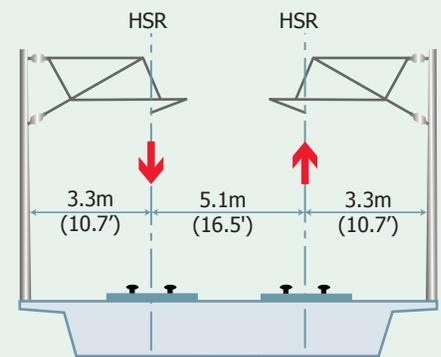
* Caltrain operates on these tracks via track rights

** In this section of the corridor HSR crosses over existing Caltrain and UPRR tracks on aerial structure to be on east side within existing Caltrain ROW.

California High-Speed Train Program EIR/EIS

**San Jose to Los Banos
Pacheco Pass
Aerial Structure**

Figure PP-10



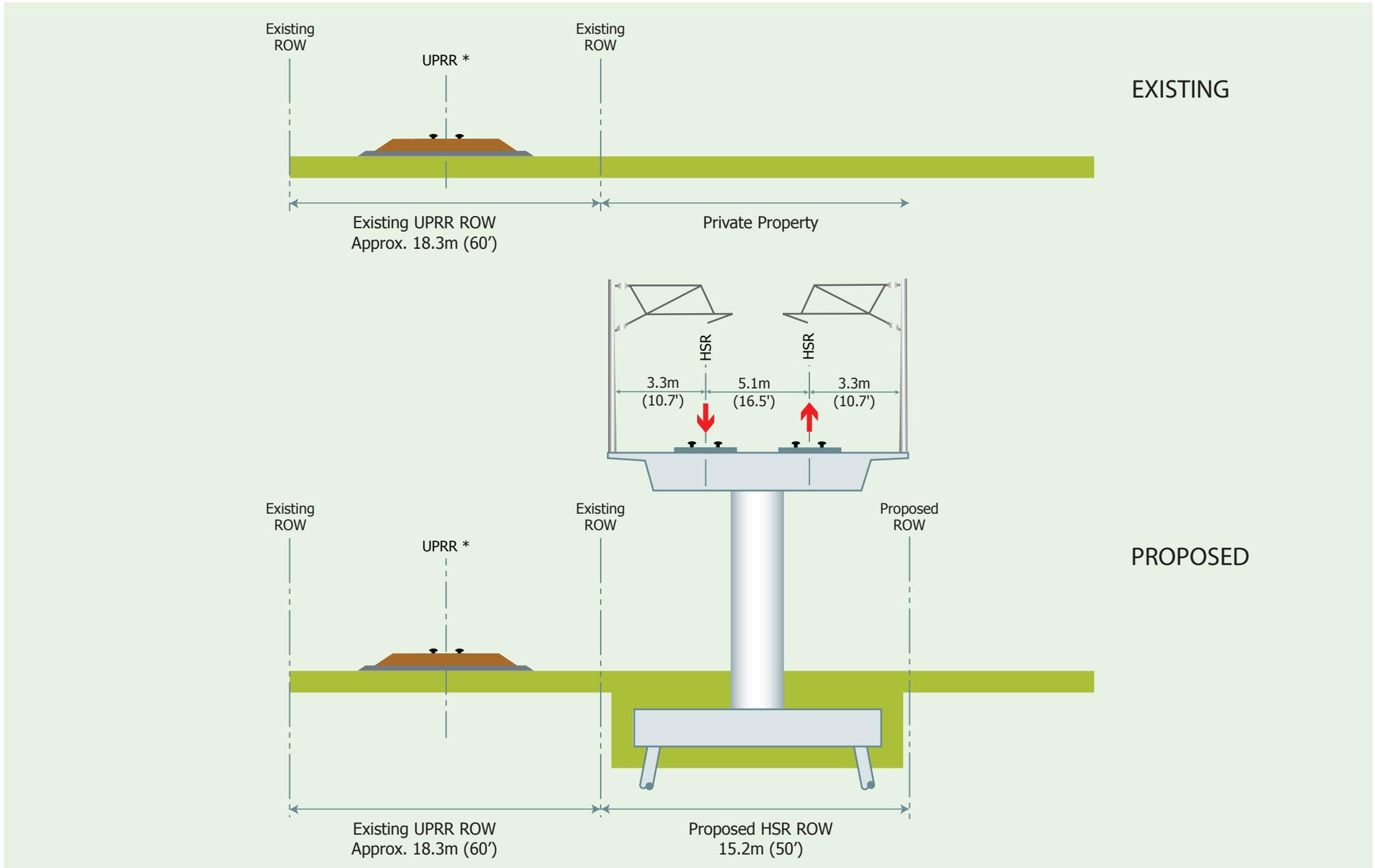
Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights

California High-Speed Train Program EIR/EIS

**San Jose to Los Banos
Pacheco Pass
Aerial Structure**

Figure PP-11



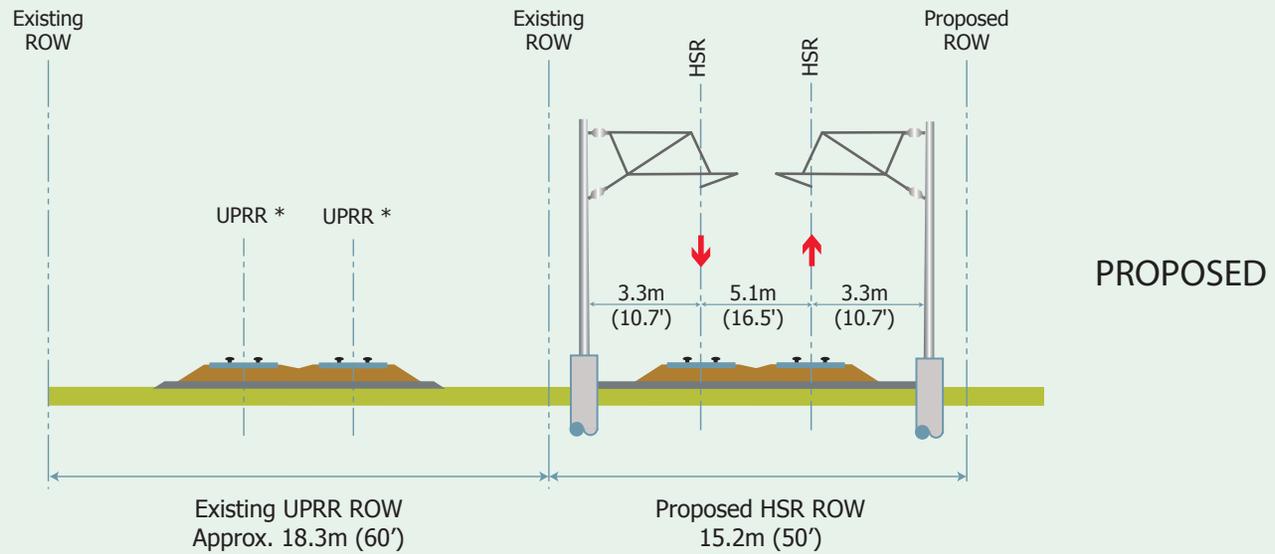
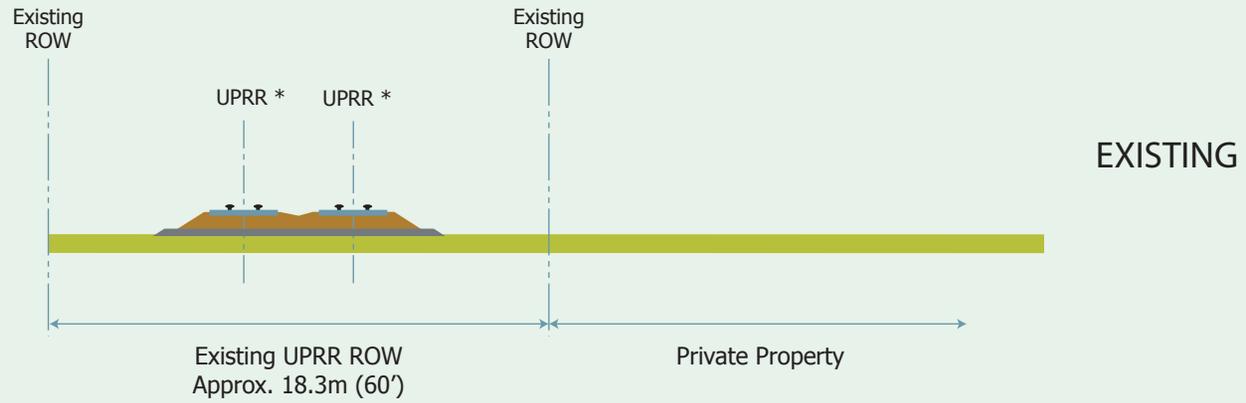
Future Caltrain
Electrification Not Shown

* Caltrain operates on these tracks via track rights
from Gilroy Station to the north

California High-Speed Train Program EIR/EIS

**San Jose to Los Banos
Pacheco Pass
Aerial Structure**

Figure PP-12



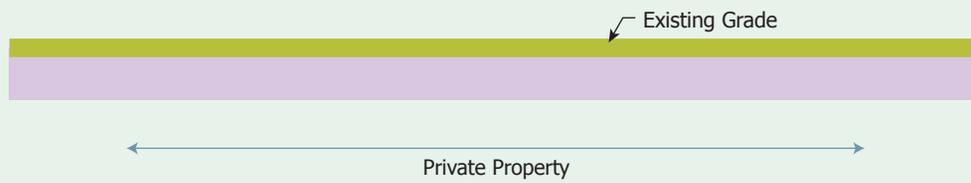
California High-Speed Train Program EIR/EIS

Future Caltrain
Electrification Not Shown

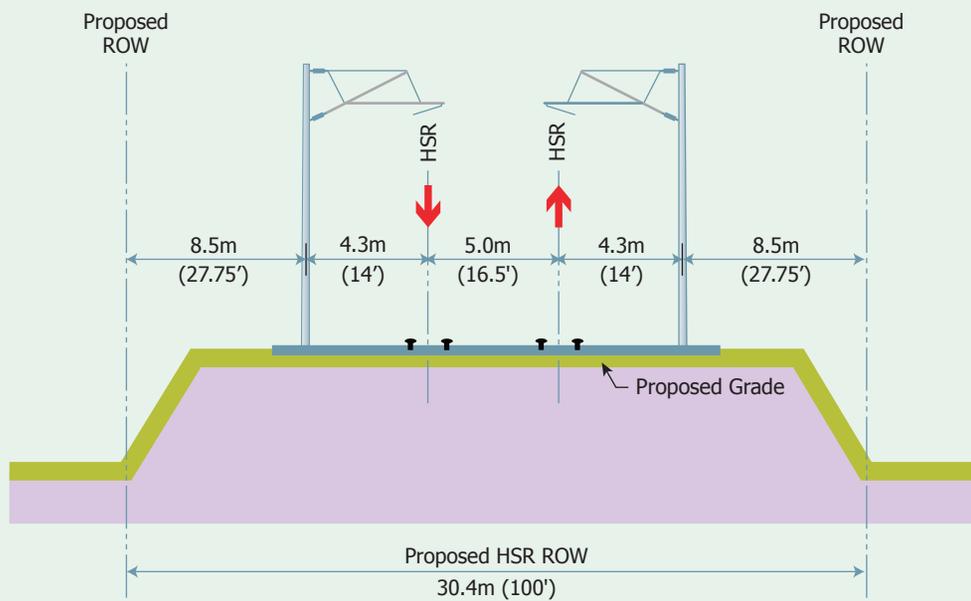
* Caltrain operates on these tracks via track rights

**San Jose to Los Banos
Pacheco Pass
Typical At-Grade Section**

Figure PP-13



EXISTING



PROPOSED

California High-Speed Train Program EIR/EIS

**San Jose to Los Banos
Pacheco Pass
Typical At-Grade Mainline Section
(Undeveloped Areas)**

Figure PP-14

**CHAPTER 3
UNION PACIFIC RAILROAD'S STATEMENTS REFUSING TO ALLOW
USE OF ITS RIGHTS-OF-WAY AND THE POTENTIAL FOR NEEDING
ADDITIONAL PROPERTY FOR THE HST ALIGNMENT
ALTERNATIVES**

3 UNION PACIFIC RAILROAD'S STATEMENTS REFUSING TO ALLOW USE OF ITS RIGHTS-OF-WAY AND THE POTENTIAL FOR NEEDING ADDITIONAL PROPERTY FOR THE HST ALIGNMENT ALTERNATIVES

The Authority circulated the Draft Bay Area to Central Valley HST Program EIR (Draft Program EIR) between July 16, 2007, and October 26, 2007. Subsequent to public circulation of the Draft Program EIR, and shortly before issuance of the 2008 Final Program EIR, the Authority received a May 13, 2008, letter from UPRR (Union Pacific Railroad 2008a). The Authority received an additional letter from UPRR on July 7, 2008 (Union Pacific Railroad 2008b).

This chapter describes UPRR's statements in its 2008 letters regarding use of its right-of-way and subsequent UPRR comments to the Authority submitted as part of the project EIR scoping process. (UPRR's letters to the Authority are included as Appendix C.) This chapter also provides a new discussion of the impact of UPRR's statements about use of its right-of-way on the potential need for more property than originally anticipated for the HST alignment alternatives and on land use compatibility. Changes to the text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlying.

3.1 Union Pacific Railroad's Statements on Use of Its Right-of-Way for the HST

UPRR's May 13, 2008, letter states:

Union Pacific has carefully evaluated CHSA's project and for the variety of reasons we discussed during our meeting, does not feel it is Union Pacific's best interest to have any proposed alignment located on Union Pacific rights-of-way. Therefore, as your project moves forward with its final design, it is our request you do so in such a way as to not require the use of Union Pacific operating rights-of-way or interfere with Union Pacific operations.

UPRR's July 7, 2008, letter indicated its support for high-speed rail but reiterated the point of its May 13, 2008, letter:

Our concern is that the project should not be designed to utilize or occupy any of our rights of way.

The July letter identified that UPRR's concerns pertain to its narrow rail right-of-way between San Jose and Gilroy, to its Central Valley rail line right-of-way, and to its freight easement on Caltrain's rail tracks between San Francisco and San Jose. With respect to the Central Valley rail line, UPRR noted that it serves industries on both sides of its rail tracks, and location of the HST system on one or both sides would disrupt existing rail-served businesses and prevent new rail-served industries from locating on one or both sides of its current rail line.

Subsequent to its 2008 letters, UPRR provided the Authority with scoping comments for the San Francisco to San Jose (Union Pacific Railroad 2009a), San Jose to Merced (Union Pacific Railroad 2009b), Merced to Sacramento (Union Pacific Railroad 2010), and Merced to Bakersfield (Union Pacific Railroad 2009c) project-level EIRs. UPRR has also provided scoping comments on the separate Altamont Corridor project (Union Pacific Railroad 2009d). These letters reiterate UPRR's 2008 comments quoted above and provide additional information about UPRR's ownership interests and operations in these areas.

The Authority is continuing an ongoing dialogue with UPRR in an effort to ensure the HST system is developed in a manner that is compatible with UPRR's freight operations. The result of those discussions could lead to cooperation between the Authority and UPRR for certain areas of the HST system. The Authority's options for avoiding impacts on UPRR freight operations are discussed further in Chapter 4 of this document.

3.2 Effect of Union Pacific Railroad's Refusal to Allow Use of Its Rights-of-Way for the HST System and the Potential for Needing Additional Property for the HST Alignment Alternatives and on Land Use Compatibility

Chapter 3.7 of the 2008 Final Program EIR concluded that land use compatibility and property impacts were significant for purposes of CEQA. Each alignment alternative was given a ranking of low/medium/high for land use compatibility and property impacts, but the final conclusion was that these impacts must be considered significant at the program level. The following discussion and analysis discloses additional information and changes in the degree of land use compatibility and property impacts for certain alignment alternatives if the Authority cannot reach an agreement with UPRR to use any portion of its rights-of-way in the Bay Area to Central Valley study area. The first section clarifies the relationship of the HST alignment alternatives to UPRR across the study area. The second section provides new material discussing the land use and property effects that would result from being outside of the UPRR mainline right-of-way. The conclusion of the 2008 Final Program EIR remains the same, however, that land use compatibility and property impacts are significant for CEQA purposes. The focus of this section is on the degree of magnitude of change in these significant impacts based on UPRR's position denying use of its rights-of-way.

3.2.1 Clarification of How the 2008 Final Program EIR Identified the Location of HST Alignments as They Relate to Union Pacific Railroad Rights-of-Way

In the 2008 Final Program EIR (and also for the Statewide HST Program EIR/EIS), the Authority's proposed HST alignment alternatives were generally configured along or adjacent to existing rail and transportation corridors. This approach of locating HST alignment alternatives along existing rail and transportation corridors is one method the Authority has used in its planning to minimize environmental impacts. Accordingly, many of the alignment alternatives analyzed in the program EIR are along or adjacent to UPRR rights-of-way, major freeway or highway rights-of-way, or other railroad rights-of-way. Some alignments, however, are new alignments that do not travel along an existing rail or transportation corridor. Figure 2.5-4 of the 2008 Final Program EIR provided a graphic presentation of those alignment alternatives that were in or adjacent to an existing transportation right-of-way (rail or highway) and those that would be new alignments. Figure 3-1 (previous Figure 2.5-4 in the 2008 Final Program EIR) is reproduced without change to illustrate the distinction between alignment alternatives that would be along an existing corridor versus creation of an entirely new corridor.

In some instances, the 2008 Final Program EIR identified that an HST alignment alternative could be fully or partially in UPRR's rights-of-way as a method of reducing environmental impacts and minimizing the need for property acquisition. Figure 3-2 provides a graphic representation of those alignment alternatives that the 2008 Final Program EIR identified as having the potential to be located fully or partially in UPRR's rights-of-way. In general, where existing UPRR rights-of-way are narrow, the 2008 Final Program EIR analyzed the HST alignment alternatives as being adjacent to the rail right-of-way, rather than in it (depicted in light blue on Figure 3-2.) In those instances where existing UPRR rights-of-way are comparatively wide, the 2008 Final Program EIR analyzed the HST alignment alternatives as potentially being accommodated fully or partially within those rights-of-way, consistent with its efforts to minimize the environmental impacts of constructing entirely new rail corridors (depicted in red on Figure 3-2). Some alignment alternatives, or portions of alignment alternatives, are not near UPRR rights-of-

way (depicted in orange on Figure 3-2). Figure 3-2 also includes notations, such as "3-2a" through "3-2o", which provide a reference to subsequent Figures 3-2a through 3-2o in this chapter.

For the alignment alternative between San Jose and Gilroy, a main focus of the *Town of Atherton* court ruling, the 2008 Final Program EIR did not assume that the alignment would be located in UPRR mainline right-of-way. Chapter 2 of this Revised Draft Program EIR Material clarifies that this alignment alternative between San Jose and Gilroy is intended to be adjacent to the UPRR mainline right-of-way between Lick and Gilroy.

3.2.2 Effect of Having No Access to Union Pacific Railroad Rights-of-Way on Land Use and the Need for Additional Property for HST Alignment Alternatives

Chapter 3.7 of the 2008 Final Program EIR described the environmental impacts in the area of land use compatibility and property impacts based on the assumptions discussed above about the potential for minimizing impacts along certain alignment alternatives based on the use of UPRR rights-of-way. The discussion on pages 3.7-19 to 3.7-41 remains valid, except as modified in Chapter 2 of this Revised Draft Program EIR Material. The following discussion is added to disclose the difference in land use and property effects that may occur if, in fact, the Authority is unable to use UPRR right-of-way across any portion of the Bay Area to Central Valley study area. By maintaining the original analysis and adding further discussion, the Revised Draft EIR Material is intended to provide the reader with the fullest possible disclosure of potential environmental effects under either scenario - if UPRR rights-of-way can be used or if they cannot. In this section, Figures 3-2a to 3-2o present photographs of typical current conditions (December 2009) along the UPRR right-of-way supplemented by the 2008 Final Program EIR cross sections and an annotated aerial image (acquired December 2009) from Google Earth.

San Francisco to San Jose Corridor

The San Francisco to San Jose corridor for HST is unique, as the rail right-of-way is public land owned by PCJPB, or Caltrain, rather than UPRR. In the 2008 Final Program EIR, four tracks including two tracks that would be used predominantly by the HST are assumed to be configured in a mix of at-grade, elevated, and below grade vertical profiles, predominately in the PCJPB right-of-way. As part of the follow-on preliminary engineering and environmental document, design variations may be applied to reduce some of the property acquisitions at the project level.

Given that the four tracks would be predominately within the PCJPB right-of-way, the high land use compatibility conclusion in the 2008 Final Program EIR is unchanged. UPRR has retained permanent and exclusive operating rights for the operation of freight trains and for the delivery of common carrier rail service over the entire line between San Francisco and San Jose, subject to certain conditions outlined in the trackage rights agreement between the PCJPB and the UPRR (Peninsula Corridor Joint Powers Board and Southern Pacific Transportation Company 1991, 1992). UPRR has also reserved a perpetual and exclusive right to conduct Intercity Passenger Service. Accordingly, UPRR's statements in its 2008 letters to the Authority that it will not allow use of its "rights-of-way" for the placement of HST alignments does not affect this corridor in the same manner as other corridors where UPRR owns the rail right-of-way outright.

In some locations, this right-of-way is not sufficiently wide enough to accommodate all four tracks and in some location would result in the acquisition of property. The 2008 Final Program EIR ranked property impacts along the San Francisco to San Jose Corridor as low based on the fact that the alignment would be built mostly within the existing publicly owned right-of-way. The information now available indicates a need for limited property acquisition along the right-of-way in narrow areas to allow for a four-track alignment that will accommodate UPRR freight operations. Accordingly, property impacts in this corridor are now ranked between low and medium, rather than low.

Oakland to San Jose Corridor

In the East Bay, from Oakland to San Jose, the HST Niles/I-880 alignment alternative is assumed to be within a portion of the UPRR right-of-way from 19th Avenue in Oakland to the Centerville Line in Fremont and between Paseo Padre Parkway in Niles and Mission Boulevard in Warm Springs. The rail corridors are densely developed for most of their length, bordered by a mix of residential, commercial and industrial uses that are built in most cases right to the edge of the UPRR right-of-way.

Figure 3-2a shows a typical condition along the Oakland to San Jose corridor. The figure depicts the conditions (November 2009) at the Hayward Amtrak Station. To the left of the photo, the soundwall of a new residential development is visible, while older commercial buildings abut the east (right) side of the right-of-way just past the overcrossing. The 2008 Final Program EIR showed the HST alignment to the east of the UPRR tracks and Amtrak platform, partially in the UPRR right-of-way and partially out of the right-of-way. North of the station (past the overpass) this configuration would require the acquisition of the commercial properties on the east side of the UPRR for a short distance, until the HST could curve gently back into the UPRR right-of-way.

Figure 3-2b shows a common condition in residential areas along the Oakland to San Jose corridor, in this case, in the City of Union City. Looking north from the H Street grade crossing, there is residential development built to the right-of-way on the east (right) side and a roadway lined with homes on the west side. In this location, both the HST and UPRR are assumed to be located at grade within the UPRR right-of-way.

Based on the assumed availability of UPRR right-of-way for placement of the Niles/I-880 alignment alternative, the 2008 Final Program EIR ranked land use compatibility in this corridor as high and the potential for property impacts as low.

Effect of UPRR Denial of Use of Right-of-Way for the Oakland to San Jose Corridor

In each case presented above, if no portion of the UPRR right-of-way is available for placement of the HST tracks, it would be necessary to move the track alignment to be located outside of, and adjacent to, UPRR's right-of-way. The properties abutting the UPRR right-of-way would need to be acquired for the HST and/or the HST would need to be constructed on an aerial structure above public or private property. In the Hayward example, it is likely that HST would be built at grade, adjacent to the UPRR right-of-way, resulting in the need to acquire the property on one side or other of the UPRR, of a width capable of accommodating two HST tracks. In the Union City example, it is likely that the HST could be built on an aerial structure just outside the UPRR right-of-way. In other locations, it is likely that an aerial structure could be used where industrial uses abut the UPRR, with the columns placed in the industrial property. This would alleviate any possible interference with spur tracks from the UPRR into the industrial properties.

Assuming UPRR right-of-way is not available in this corridor, the impact ranking for land use compatibility and property impacts would change. The Niles/I-880 alignment alternative would have medium land use compatibility, rather than high land use compatibility. Property impacts would be ranked medium, rather than low, based on the need to acquire new right-of-way.

San Jose to Central Valley Corridor

From San Jose to the junction with the north-south HST line near Chowchilla, the HST line follows the UPRR rail corridor from San Jose to south of Gilroy along the Pacheco alignment alternative. This alignment alternative starts as an elevated station above the existing Caltrain/Amtrak/ACE/Capitol Corridor platforms at Diridon Station. The Pacheco alignment alternative remains aerial until crossing the I-280 freeway, descending into the existing PCJPB owned right-of-way. North of Lick near where the railway meets Monterey Highway, the HST transitions to run on the east side of the existing railway right-of-way, as the ownership of the existing right-of-way changes from PCJPB (north of

Lick) to the UPRR (south of Lick). Here, HST is proposed to be placed within the right-of-way of Monterey Highway, which would need to be reconstructed generally within the existing highway right-of-way north of Bernal Road and with some right-of-way acquisition along the east side of the highway. The need for and advisability of a safety barrier between the UPRR and HST tracks will be evaluated during the project-level engineering and environmental review for that portion of the HST alignment along Monterey Highway between Lick and Coyote.

South of Coyote to Morgan Hill, the Pacheco alignment alternative would continue to run in the right-of-way of Monterey Highway, but because of the existing configuration of the highway and right-of-way width, Monterey Highway would be relocated and reconstructed approximately 50-60 feet to the east. Figure 3-2c presents an existing overcrossing along Monterey Highway. Where the railway corridor moves away from Monterey Highway, the HST tracks would remain adjacent to and east of the UPRR right-of-way. Approaching the Morgan Hill Caltrain Station, the HST would ascend to an aerial alignment to pass over local streets and an industrial spur that serves business on the east side of the UPRR.

South of Morgan Hill, the HST on the Pacheco alignment alternative would descend to run at-grade alongside the UPRR right-of-way until ascending to another aerial structure to pass through Gilroy. The Gilroy HST station would be elevated adjacent to the non-mainline UPRR right-of-way, near the existing Gilroy Caltrain station. This is shown in Figure 3-2d.

After passing over US 101 and an industrial spur to the east of the UPRR mainline right-of-way, the HST would descend to grade and turn away from the UPRR corridor to extend through Pacheco Pass and across the San Joaquin Valley to Chowchilla.

Effect of UPRR Denial of Use of Right-of-Way for the San Jose to Central Valley Corridor

UPRR's denial of use of its rights-of-way has relatively little effect in this corridor because the Pacheco alignment alternative is assumed to be located adjacent to UPRR mainline right-of-way. The Authority and the PCJPB have a memorandum of agreement providing for the placement of the HST tracks for that portion of the San Jose to Central Valley Corridor between San Jose and Lick (California High-Speed Rail Authority and Peninsula Corridor Joint Powers Board 2004, 2009). Between Lick and Gilroy, the HST would be adjacent to but outside the UPRR mainline right-of-way. The impact rankings discussed above in Chapter 2 for the area between San Jose and Gilroy on the Pacheco alignment alternative are therefore not affected. Land use compatibility would be ranked medium.

In Gilroy, the HST alignment and station is assumed to be aerial adjacent to UPRR's mainline right-of-way east of the existing Caltrain station without disrupting UPRR operations. In those cases where the HST alignment may cross UPRR non-mainline right-of-way including spur tracks, one of four actions would occur – (1) HST would go under UPRR property (trench or tunnel); (2) HST would fly over the UPRR property on an aerial alignment providing adequate vertical and horizontal clearances as required by California Public Utilities Commission General Order 26-D (1981) and consistent with UPRR standards and procedures (BNSF Railway–Union Pacific Railroad 2007); (3) spur tracks would be relocated maintaining UPRR spur track access; (4) property would be acquired through negotiations with UPRR (see Chapter 4). The potential need for additional property to locate an HST station in Gilroy to the east of the UPRR mainline right-of-way would increase the overall property impact from low to medium. Alternatives to the program alignment and a station to the south are also currently under consideration, including (1) a possible station in Morgan Hill rather than Gilroy, (2) an alignment between the Diridon Station and the Caltrain Tamien Station that would diverge from the PCJPB right-of-way and make use of the I-280/SR-87 highway rights-of-way near downtown San Jose, (3) a tunnel alternative in downtown San Jose between the Diridon Station and the Caltrain Tamien Station, and (4) an alternative near US 101 south of Coyote.

East of Gilroy, the HST alignment alternative travels over the Pacheco Pass and across the San Joaquin Valley using the Henry Miller or GEA North alignment alternatives. The HST would fly over a branch line of the UPRR in the Volta area on an aerial structure.

East Bay to Central Valley Corridor

The East Bay to Central Valley corridor extends from Fremont to Manteca via Pleasanton, Livermore and Tracy through Niles Canyon and the Altamont Pass. From west to east, the HST UPRR alignment alternative would pass over the UPRR's Alviso line near Stevenson Boulevard. The HST UPRR alignment would be adjacent to a UPRR spur track along Stewart Avenue. In both cases, the UPRR alignment alternative would be on an aerial structure and would not interfere with UPRR operations. East of Fremont Central Park, the UPRR alignment alternative would be in a cut and cover tunnel beneath the former Western Pacific line, abandoned but owned by UPRR.

East of Niles Canyon, the UPRR alignment alternative would be on aerial structure within the UPRR right-of-way just west of I-680. This HST alignment would be elevated, with the support columns within the UPRR right-of-way but to one side. Figure 3-2e shows this condition, just east of Santa Rita Road. Further east, this HST alignment would return to grade and be within the UPRR right-of-way adjacent to Stanley Boulevard. Figure 3-2f shows this condition. The UPRR alignment alternative would continue partially in the UPRR right-of-way through Livermore, as shown in Figure 3-2g.

After passing over the Altamont Pass on a new alignment, the HST would cross the City of Tracy on one of two UPRR-owned right-of-ways. The Tracy ACE Station (UPRR Connection) alignment alternative would enter the UPRR right-of-way where the UPRR curves away from West Linne Road. This alignment alternative would run at grade adjacent to the UPRR right-of-way. This alignment alternative would remain adjacent to the UPRR right-of-way until the Paradise River, near the junction of I-205 and I-5. The Tracy Downtown (UPRR Connection) alignment alternative would enter the UPRR right-of-way near South Lammers Road and follow it towards the City of Manteca. This alignment is shown in Figure 3-2h.

Based on the assumed availability of UPRR right-of-way for placement of the UPRR alignment alternative, the 2008 Final Program EIR ranked land use compatibility in this corridor as medium-high and the potential for property impacts as medium. For the Tracy ACE Station (UPRR Connection) and Tracy Downtown (UPRR Connection) alignment alternatives, the 2008 Final Program EIR ranked land use compatibility in this corridor as medium and the potential for property impacts as medium.

Effect of UPRR Denial of Use of Right-of-Way for the East Bay to Central Valley Corridor

Should it be necessary to construct the HST along the same routes without using any UPRR right-of-way, it would be necessary to acquire adjacent properties next to UPRR or to use a different alignment alternative. If the UPRR right-of-way is not available for the HST in the Fremont area, the UPRR alignment alternative along Stewart Avenue would need to be moved into the electrical transmission line corridor adjacent to the UPRR right-of-way, with appropriate adjustments made to the transmission lines. East of Fremont Central Park, the cut and cover construction could be replaced by a bored tunnel under the abandoned UPRR line.

Through Pleasanton and Livermore, the HST could avoid use of UPRR right-of-way by using the I-680/580/UPRR alignment alternative. This would take the HST north along the I-680 freeway on an aerial structure which would continue above the median of I-580 until the Altamont Pass.

For the Tracy ACE Station (UPRR Connection) alignment alternative, it would require purchase of some recently-developed residential properties and agricultural land. In the case of the Downtown Tracy (UPRR Connection) alignment alternative, there would also be a number of residential properties that would need to be acquired, along with agricultural properties.

Assuming UPRR right-of-way is not available in this corridor, the impact ranking for land use compatibility and property impacts would change. The land use compatibility ranking for the UPRR alignment alternative in the Fremont area would remain unchanged as medium-high. Property impacts would be ranked medium-high, rather than medium, based on the need to acquire new right-of-way in an electrical transmission corridor. The ranking of land use compatibility (high) and property impacts (high) for the I-680/580/UPRR alignment alternative would be same as identified in the 2008 Final Program EIR. The land use compatibility ranking for the Tracy ACE Station (UPRR Connection) and Tracy Downtown (UPRR Connection) alignment alternatives would change from medium to low-medium and the property impacts ranking would change from medium to medium-high based on the need to acquire additional residential properties.

San Francisco Bay Crossings

Two sets of alignment alternatives were studied for a HST crossing of San Francisco Bay: between Downtown San Francisco and Alameda/Oakland on the Transbay alignment alternatives (Transbay Crossing-Transbay Transit center and Transbay Crossing-4th & King) and from the Peninsula to the East Bay on the Dumbarton alignment alternatives (high and low bridges and tube) and the Fremont Central Park alignment alternatives (high and low bridges). The HST crossing in the Transbay Corridor would be completely in tunnel, so no interaction with the UPRR would occur

The Dumbarton alignment alternatives crossing would begin in Redwood City where the corridor meets the Caltrain corridor. It uses the San Mateo County Transportation District owned right-of-way to approach San Francisco Bay. The existing right-of-way with the single track that is currently used for freight access by the UPRR would require two additional tracks for the HST service. The HST would cross the wetlands and open water of San Francisco Bay on a new, two-track bridge built parallel to the existing Dumbarton rail bridges and embankment.

Once across the bay, in the City of Newark, near Willow Street, the ownership of the right-of-way changes from PCJPB to UPRR. In this area, the alignment transitions from an at-grade configuration to an aerial alignment and continues aerial across Newark and Fremont, following the UPRR for most of the distance. Development along the UPRR consists mainly of residential with some pockets of commercial. Figure 3-2i shows the aerial configuration just east of the Centerville ACE/Amtrak station. The columns for the aerial HST structure would be placed at one edge or the other of the UPRR right-of-way.

Based on the assumed availability of UPRR right-of-way for placement of the Dumbarton alignment alternatives, the 2008 Final Program EIR ranked land use compatibility in this corridor as medium and the potential for property impacts as medium.

Effect of UPRR Denial of Use of Right-of-Way for the San Francisco Bay Crossings

If no portion of the UPRR right-of-way is available, there is no effect on the Transbay Crossing alignment alternatives because the HST would be below grade under the Bay. Accordingly, the 2008 Final Program EIR rankings of high land use compatibility and low property impacts would remain the same.

If no portion of the UPRR right-of-way through Fremont is available on the Dumbarton alignment alternatives for the HST, properties abutting the UPRR would need to be acquired for the HST and/or the HST would need to be constructed on an aerial structure with columns placed just outside the UPRR right-of-way in public street right-of-way, where available, or on the edge of acquired residential or commercial parcels. This area is densely developed along the UPRR right-of-way with homes and businesses. A shift in the location of the Dumbarton alignment alternatives to avoid the UPRR right-of-way would result in the land use compatibility ranking changing from medium to low, and the property impacts changing from medium to high.

Central Valley Corridor

The Central Valley alignment alternatives extend from Stockton to Merced. There were two primary sets of alignment alternatives studied, one generally following the Burlington Northern Santa Fe (BNSF) Railway line, which runs east of the downtowns of most cities, and the UPRR line, which parallels SR-99 and passes closer to the downtowns of the Central Valley cities.

The UPRR N/S alignment alternative starts at the Stockton HST station, located at the existing ACE station. The HST tracks would be elevated above the UPRR right-of-way. It would descend into the UPRR right-of-way south of SR-4. Running south towards Merced, the UPRR N/S alignment alternative would generally stay within the UPRR right-of-way, as shown in Figure 3-2j. Where the UPRR right-of-way narrows, right-of-way adjacent to the UPRR was assumed to have to be acquired for the HST tracks. This condition is shown in Figure 3-2k. Figure 3-2l shows a variation on this situation, the Modesto HST station, where most of the station tracks and facilities would be outside the existing UPRR right-of-way.

At many locations along the existing UPRR N/S alignment alternative, spur tracks leave the UPRR mainline to serve industries along the line. In these locations, the UPRR N/S alignment alternative would ascend to an aerial alignment to pass over the spur tracks, thereby maintaining access from the UPRR mainline to the industries. Figure 3-2m shows an example of this condition.

Where the UPRR passes through areas with many consecutive grade crossings, such as the downtown districts of towns along the line, the HST would ascend to an aerial structure. This would allow all cross streets to remain open, minimizing disruption to the connectivity across the HST alignment. A typical condition is shown in Figure 3-2n.

In Merced, the UPRR N/S alignment alternative would be at grade, and outside the UPRR right-of-way as it approaches the Merced HST station. This is shown in Figure 3-2o. Cross streets would be grade separated from both the HST and UPRR in this area.

Based on the assumed availability of UPRR right-of-way for placement of the UPRR N/S alignment alternatives, the 2008 Final Program EIR ranked land use compatibility in this corridor as medium and the potential for property impacts as low.

Effect of UPRR Denial of Use of Right-of-Way for the Central Valley Corridor

If the HST could not use the UPRR right-of-way in this corridor, additional right-of-way acquisition would be necessary for the UPRR N/S alignment alternative to allow for the HST tracks to be adjacent to, but not within the UPRR right-of-way. This would involve acquisition of agricultural, commercial and residential properties along parts of the UPRR corridor between Ripon and Salida, in Modesto, in Ceres, Turlock, Atwater, and Merced. It would also require more extensive reconstruction/extensions of the existing overcrossings that cross SR-99 and the UPRR. The need for increased property acquisition to construct the HST tracks in some areas along the UPRR N/S line results in its property impact ranking changing from low to medium. The land use compatibility ranking in the 2008 Final Program EIR indicated that the UPRR N/S alignment was considered of medium compatibility for business/commercial, and industrial/agricultural uses, and low compatibility for residential uses. These rankings would remain the same if the alignment must shift to avoid UPRR rights-of-way.

An alternative is available that would avoid the impacts described above. The BNSF rail right-of-way in this corridor could be used as an alignment alternative that has no interface with UPRR right-of-way. This alignment alternative would, however, shift the location of the Modesto HST station from downtown Modesto to Briggsmore, where the existing Amtrak station is located.

3.3 Summary of How Lack of Any Union Pacific Railroad Right-Of-Way for HST Alignment Alternatives Affects the Significance Conclusions in the 2008 Final Program EIR

Chapter 3.7 of the 2008 Final Program EIR identified land use impacts, including both land use compatibility and property impacts, as significant for purposes of CEQA for all of the alignment alternatives. The analysis, however, identified differences in the level of impact that reflected the level of compatibility of an alignment with surrounding land uses. The text also identified mitigation strategies that were anticipated to reduce the impacts to less-than-significant at the project level.

The 2008 Final Program EIR's significance conclusion prior to application of mitigation strategies does not change based on UPRR's statements denying use of its rights-of-way for HST purposes; the land use impacts of the HST alignments remain significant under CEQA. If UPRR rail right-of-way is not available, however, the magnitude and nature of the significant land use impacts differs by corridor, as outlined above. Moreover, the ability of mitigation strategies to reduce the impacts to less than significant become less clear for certain of the alignment alternatives, including the Oakland to San Jose corridor from Fremont north and within the City of Santa Clara, the San Jose to Central Valley corridor through downtown Gilroy, the East Bay to Central Valley corridor through Pleasanton, Livermore and Tracy, the San Francisco Bay Crossing corridor through Fremont and portions of the Central Valley UPRR corridor. For this reason, and based on the uncertainty of ongoing discussions between the Authority and UPRR, land use impacts of the HST alignment alternatives overall would be considered significant, even with the application of mitigation strategies.

The lack of availability of UPRR right-of-way would also appear to make some alignments far more difficult to accomplish because of the magnitude of additional property acquisition that would be required, including Oakland to San Jose and East Bay to Central Valley through Pleasanton, Livermore and Tracy. The additional property needed for these alignments would greatly increase the cost beyond that originally anticipated, as well as result in additional time delays for acquiring the necessary right-of-way from numerous property owners rather than from UPRR as a single property owner.

Switching to a secondary alignment, such as the I-680/580/UPRR alignment alternative around Pleasanton and Livermore to avoid the UPRR would increase constructability issues (elevated in the median of I-580 above active BART line) and operational issues (restricted speed in vicinity of I-580/680 interchange). Using the south Tracy alignment (S UPRR alignment alternative) or BNSF alignment to avoid the UPRR would move HST stations from established downtowns in Tracy and Modesto to locations on the edges of the cities, impacting transit connections and opportunities to encourage development in downtown areas.

FIGURES 3-1 THROUGH 3-2o

Figure	Name
3-1	Relation to Existing Transportation Corridors
3-2	UPRR Interface Locations
3-2a	Hayward Amtrak Station
3-2b	Union City
3-2c	Monterey Highway in Coyote Valley
3-2d	Downtown Gilroy
3-2e	Pleasanton
3-2f	Stanely Boulevard (between Pleasanton and Livermore)
3-2g	Livermore
3-2h	Tracy
3-2i	Centerville Station
3-2j	Manteca
3-2k	Ripon
3-2l	Modesto
3-2m	Keyes
3-2n	Downtown Turlock
3-2o	Downtown Merced

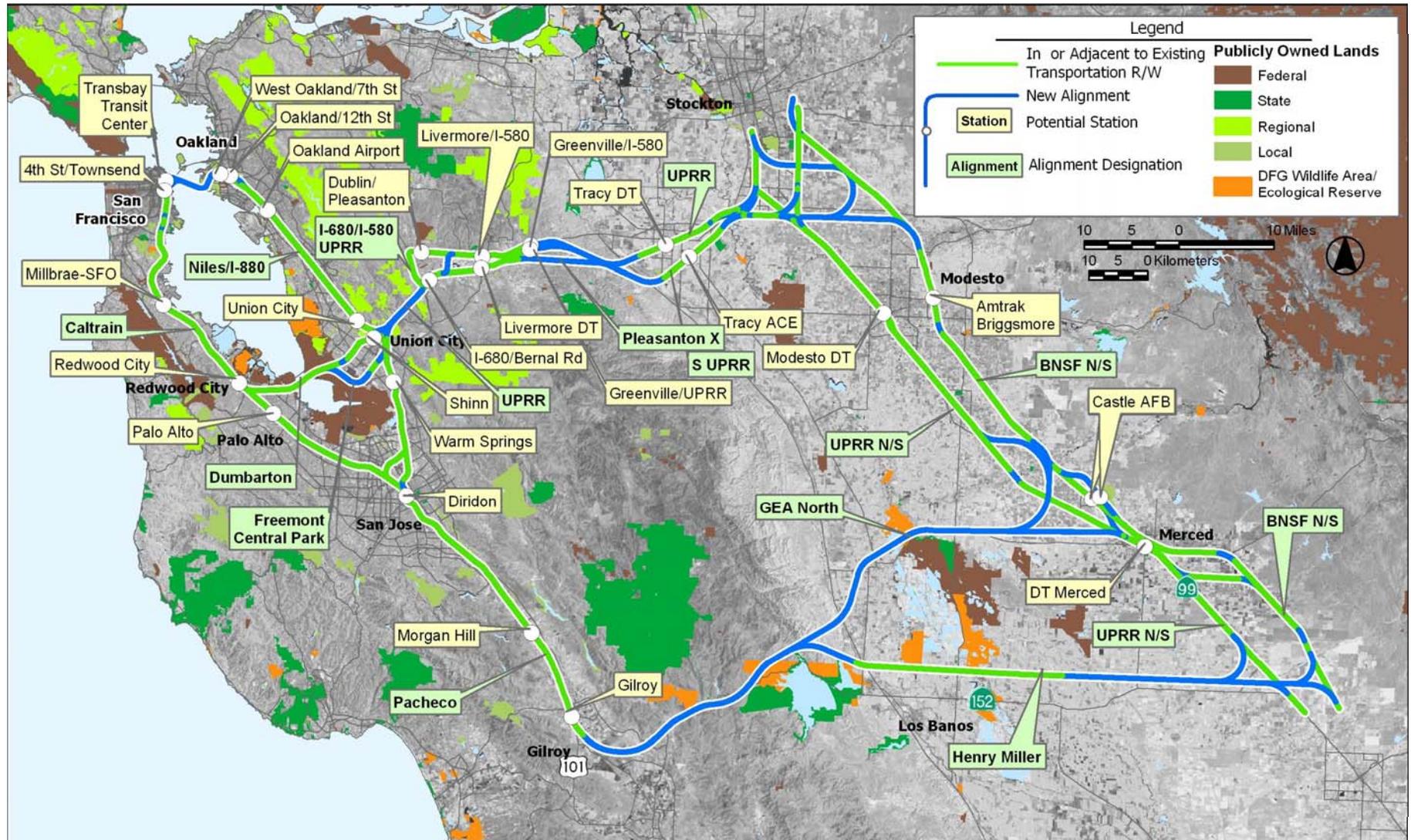
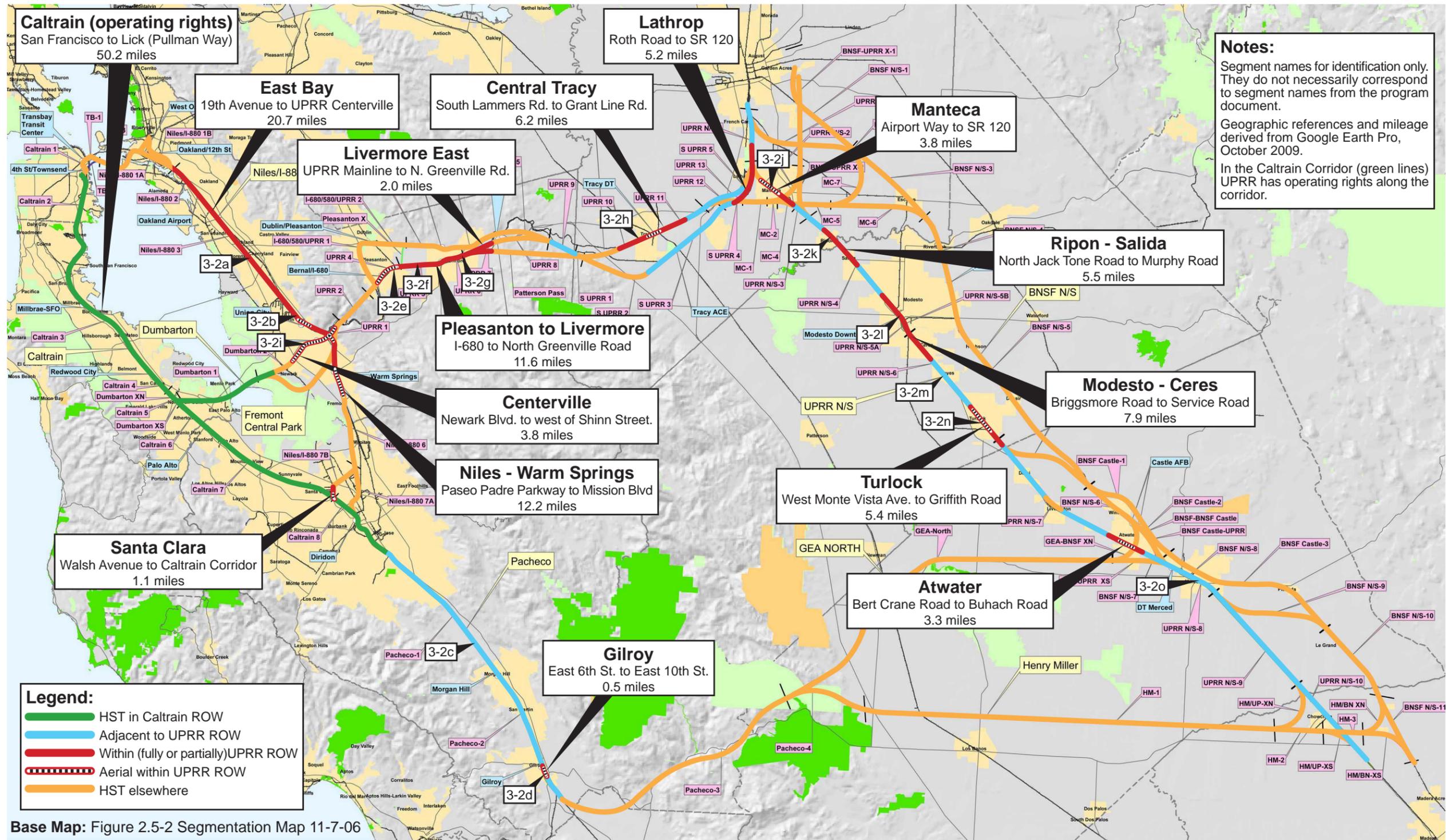


Figure 2.5-4, Relation to Existing Transportation Corridors (May 2008)



Figure 3-1
Relation to Existing Transportation Corridors
Bay Area to Central Valley HST Revised Draft Program EIR Material





Looking north from the east platform at the Hayward Amtrak station.

A Street overcrossing in foreground.

New townhome development immediately to the west (left).

Right-of-way is approximately 100 feet wide north of overcrossing, 80 feet wide to the south.

BA-CV Program Alignment - At Grade east of existing platform and tracks

May 2008 Final Program EIR, Figure NS-S4 (Page 2-E-45)

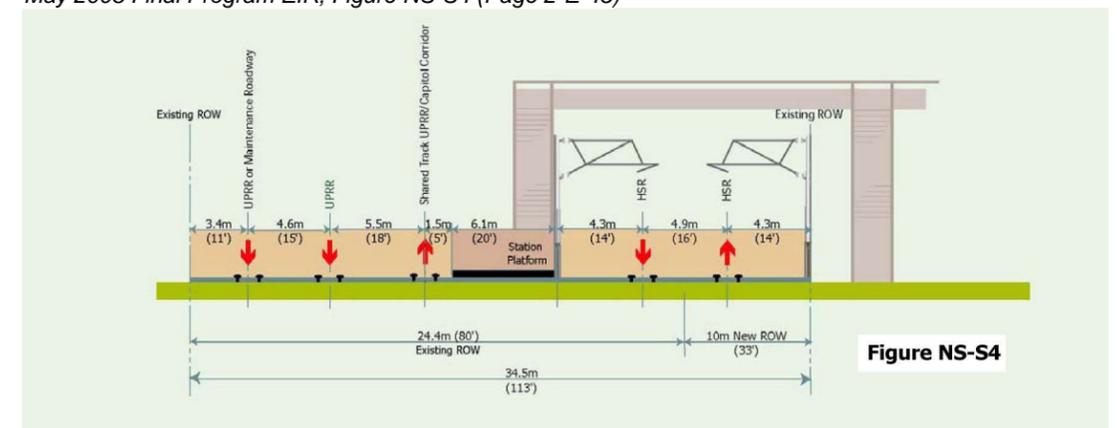
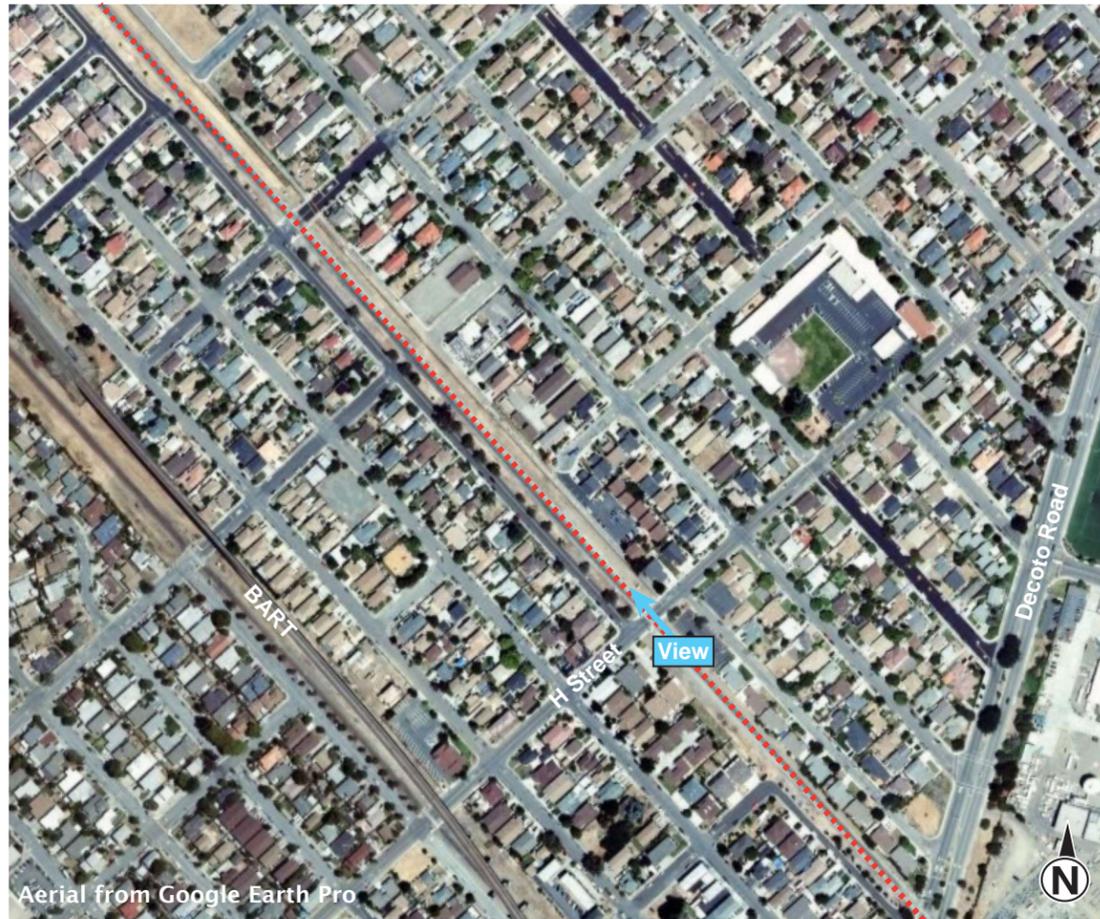


Figure NS-S4



Oakland to San Jose
Niles Subdivision Line to I-880
Hayward Amtrak Station
Page 2-E-45



Aerial from Google Earth Pro

Looking north from the H Street grade crossing in Union City
 Right-of-way is approximately 80 feet wide.

BA-CV Program Alignment - At grade in existing right-of-way



May 2008 Final Program EIR, Figure NS-3 (Page 2-E-19)

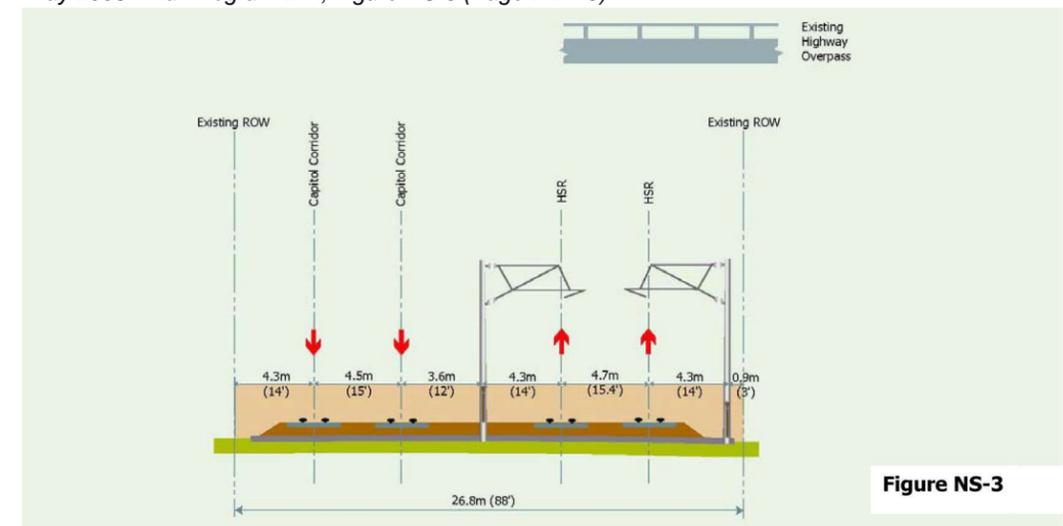


Figure NS-3

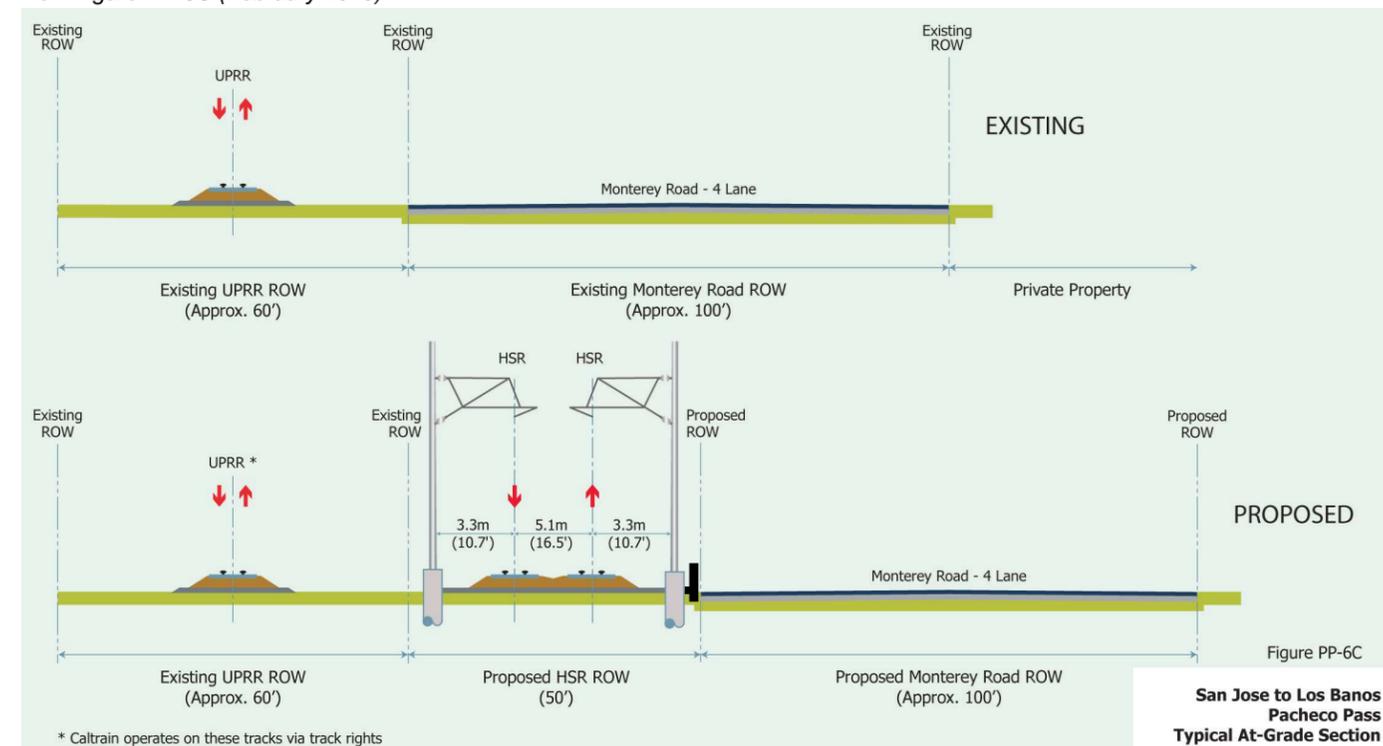


Oakland to San Jose
 Niles Subdivision Line to I-880
 F Street to BART ACCESS Road
 Figure 2-E-19



Note: View above is looking south, section below is looking north.

New Figure PP-6C (February 2010)



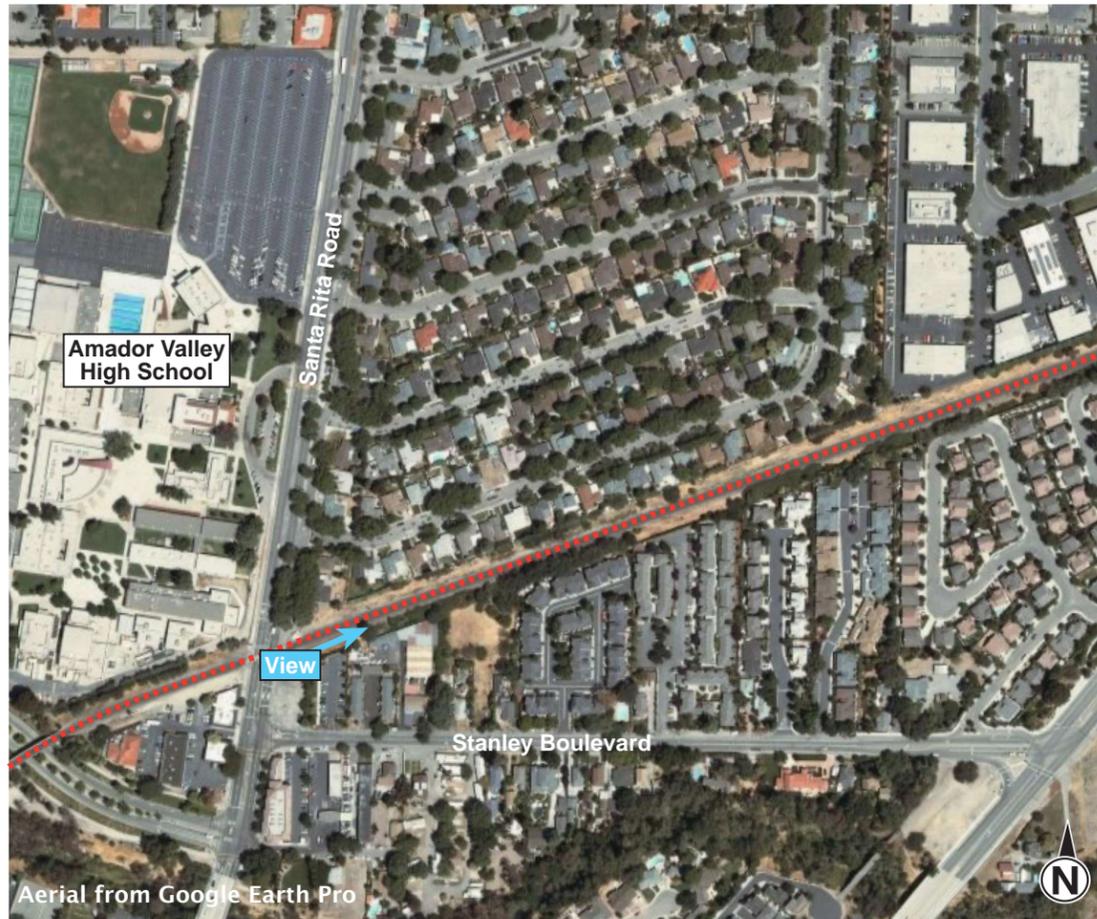
San Jose to Los Banos
Pacheco Pass
Typical At-Grade Section

Looking south to the Bailey Avenue grade separation.
 UPRR is to the right, parallel to the highway, behind the trees.
 Right-of-way is approximately 60 feet wide.
 BA-CV Program Alignment - At-grade within existing right-of-way

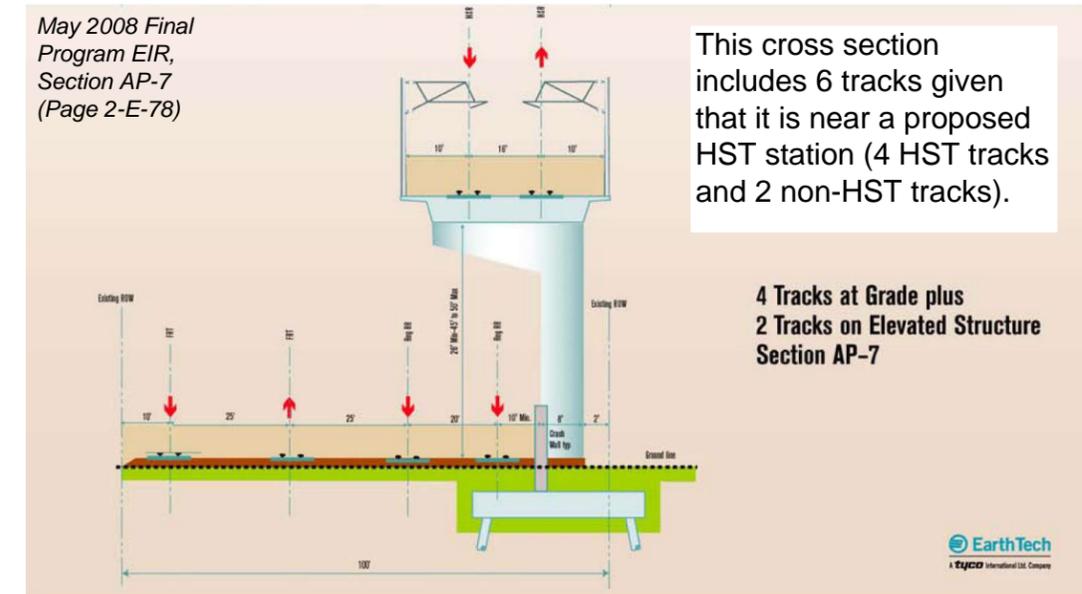


February 2010

Figure 3-2c
Monterey Highway in Coyote Valley
Bay Area to Central Valley HST Revised Draft Program EIR Materials



Looking east from the Santa Rita Road grade crossing in Pleasanton.
 Residential development on each side of right-of-way.
 Right-of way is approximately 100 feet wide.
 BA-CV Program Alignment - Elevated in existing right-of-way



Bay Area To Central Valley
 Altamont Pass
 Page 2-E-78



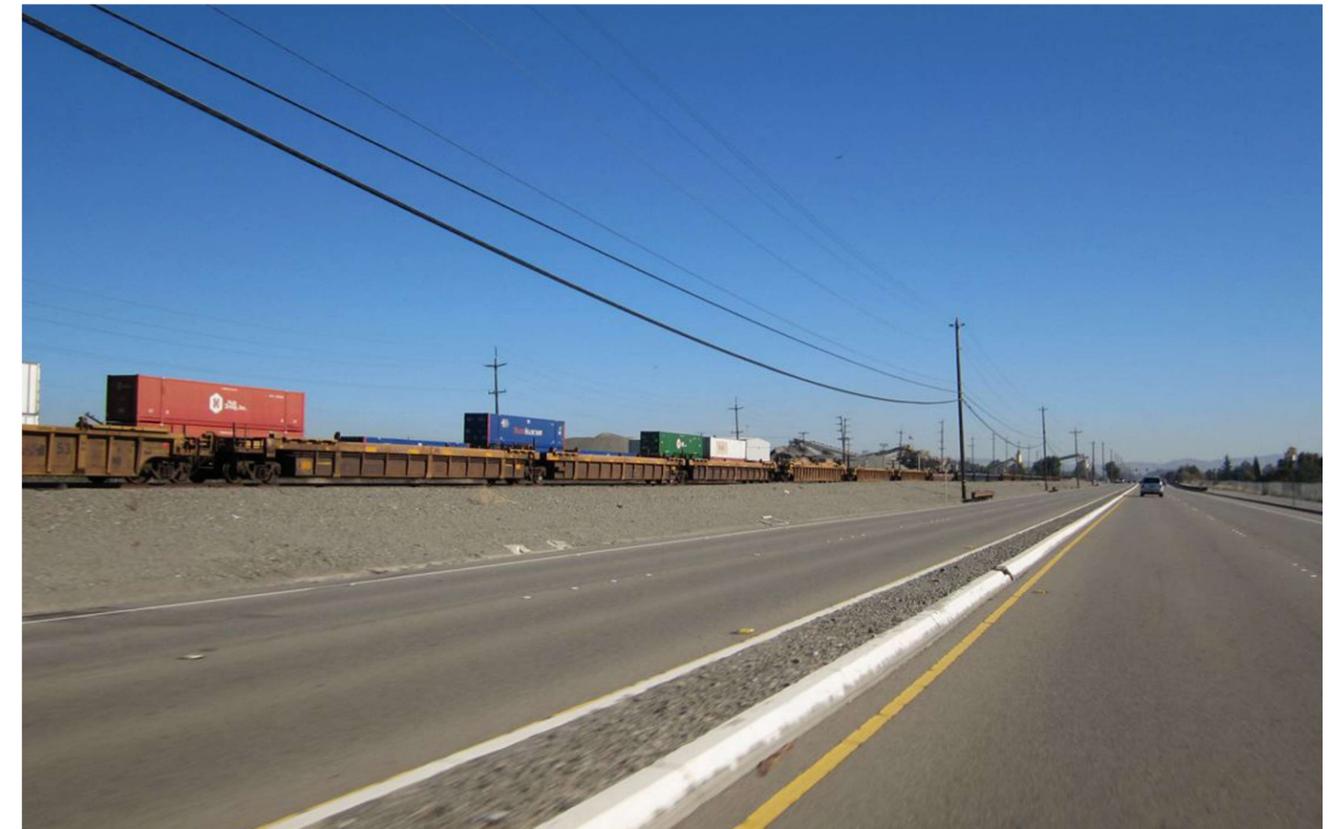
February 2010

Figure 3-2e
Pleasanton
 Bay Area to Central Valley HST Revised Draft Program EIR Materials

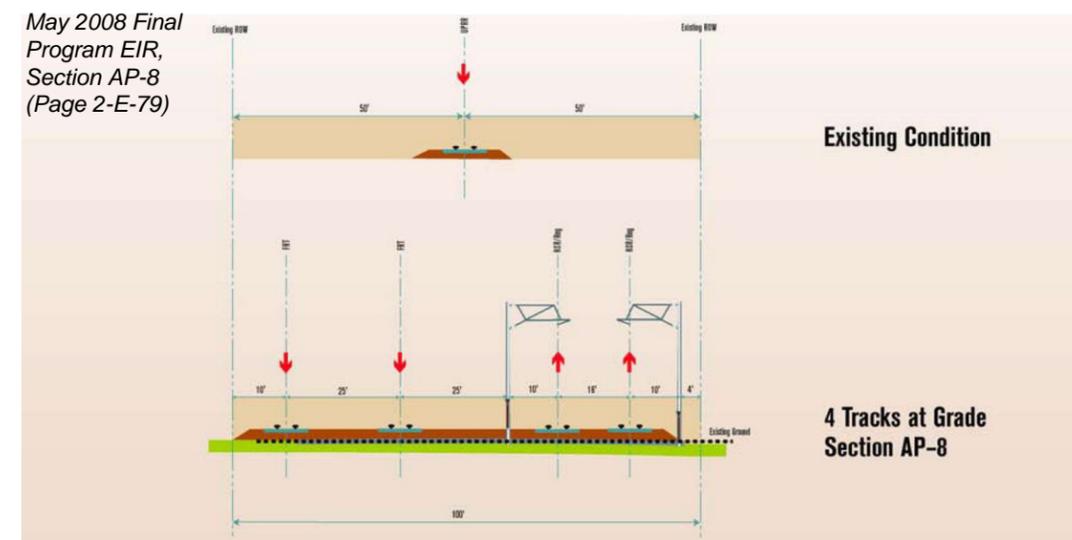


Aerial from Google Earth Pro

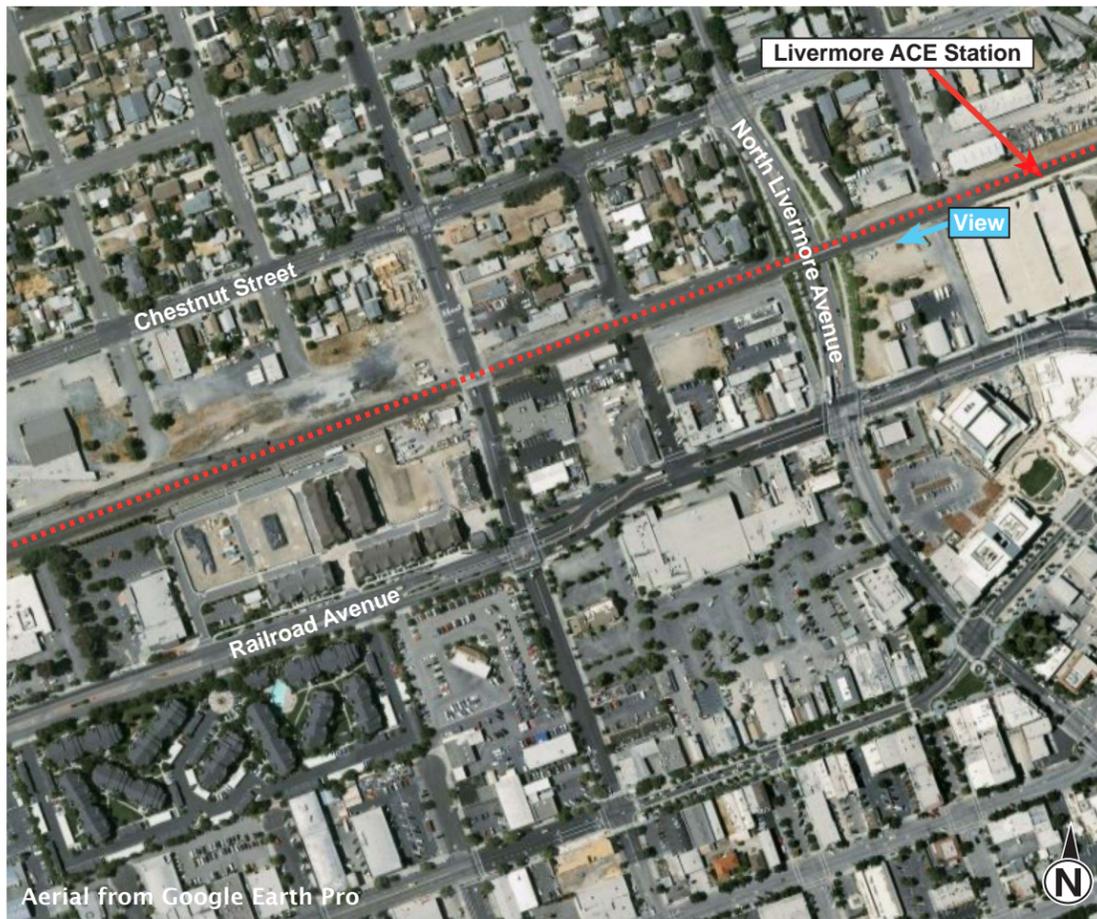
Looking east along Stanley Boulevard.
 Quarries and gravel pits to north (left) of rail right-of-way.
 Railroad right-of way is approximately 200 feet wide.
 Highway right-of-way is approximately 75 feet wide.
 BA-CV Program Alignment - At grade in existing right-of-way



May 2008 Final Program EIR, Section AP-8 (Page 2-E-79)

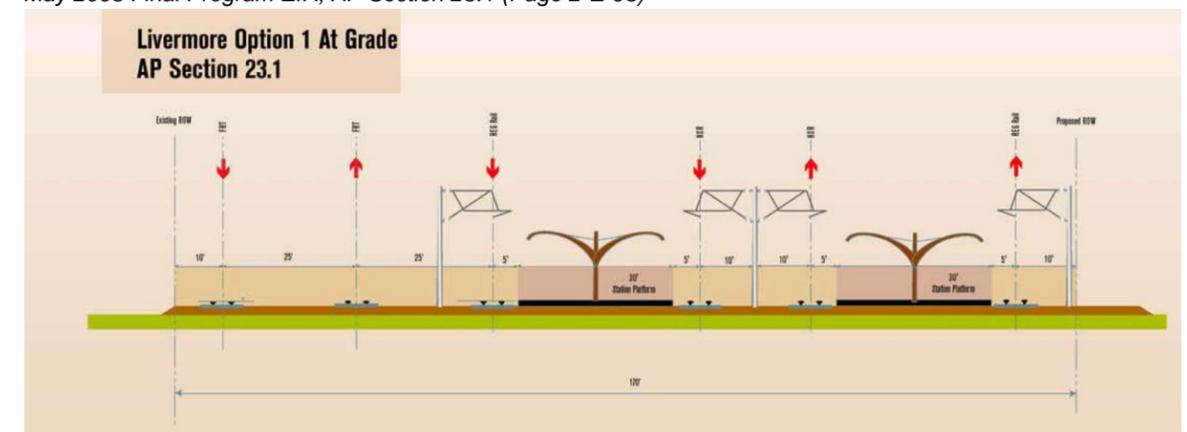


Bay Area To Central Valley
 Altamont Pass
 Page 2-E-79

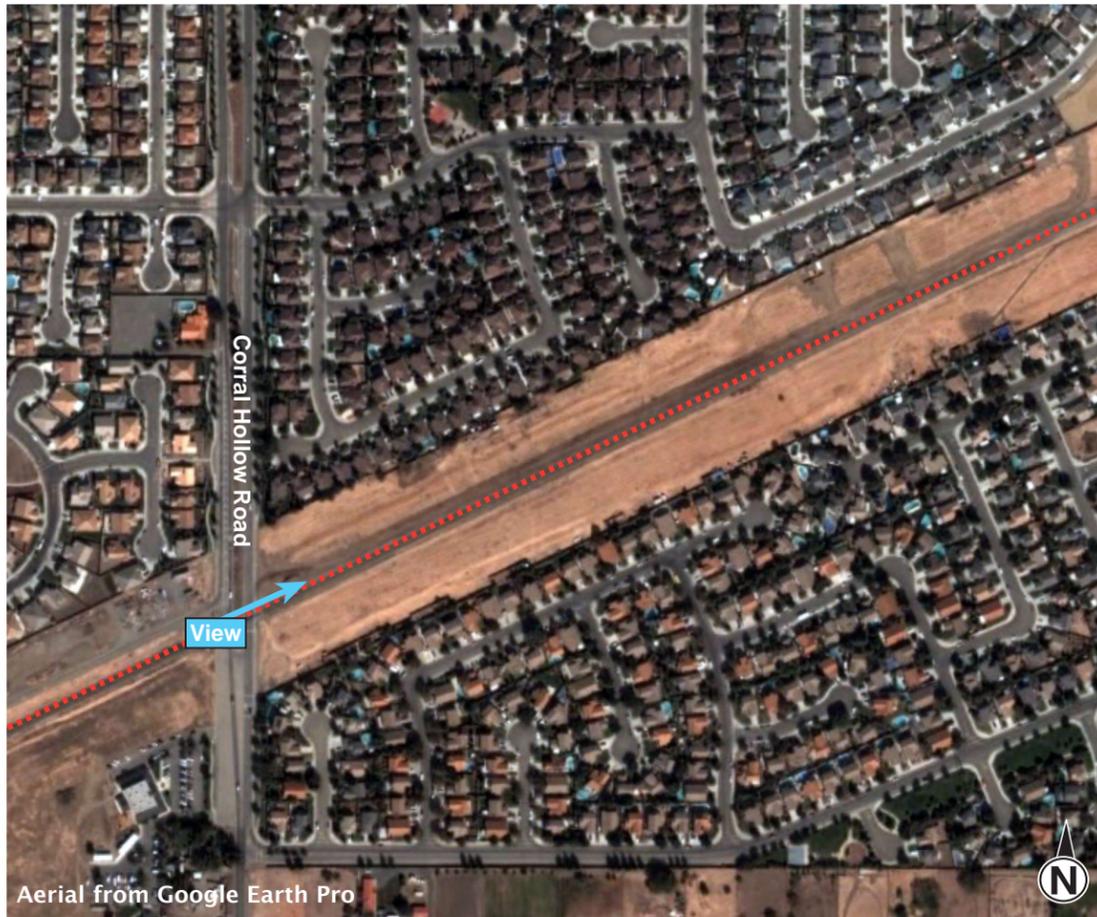


Looking west from the parking garage at the Livermore ACE station.
 North Livermore Avenue undercrossing in foreground.
 UPRR freight track to the north (right) in midground.
 Right-of way varies from approximately 60 to 90 feet wide.
 BA-CV Program Alignment - Two to four tracks at grade partially within existing right-of-way

May 2008 Final Program EIR, AP Section 23.1 (Page 2-E-93)



Bay Area To Central Valley
 Altamont Pass
 Page 2-E-93



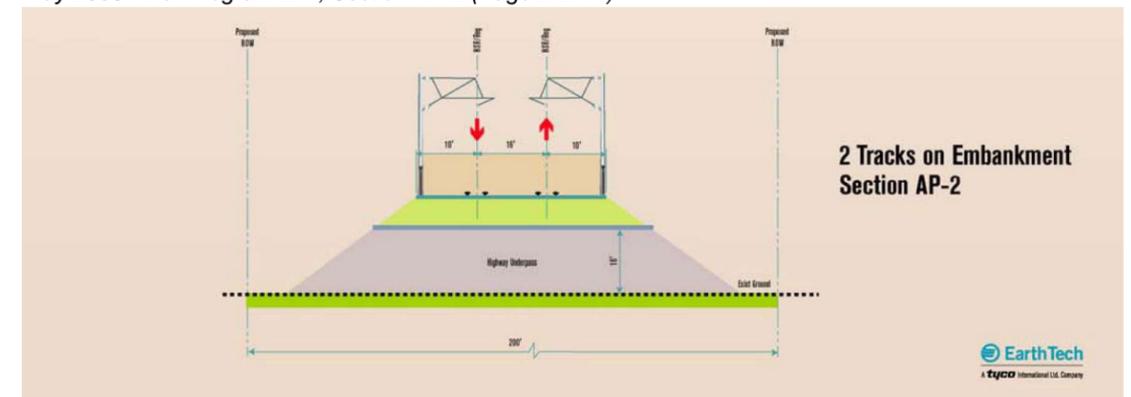
Aerial from Google Earth Pro

Looking east from the Corral Hollow Road grade crossing in Tracy.
 Residential development on each side of right-of-way.
 Right-of way is approximately 400 feet wide.
 BA-CV Program Alignment - On embankment in existing right-of-way



The cross section shown below shows that the HST would be elevated over the roadway pictured above.

May 2008 Final Program EIR, Section AP-2 (Page 2-E-74)

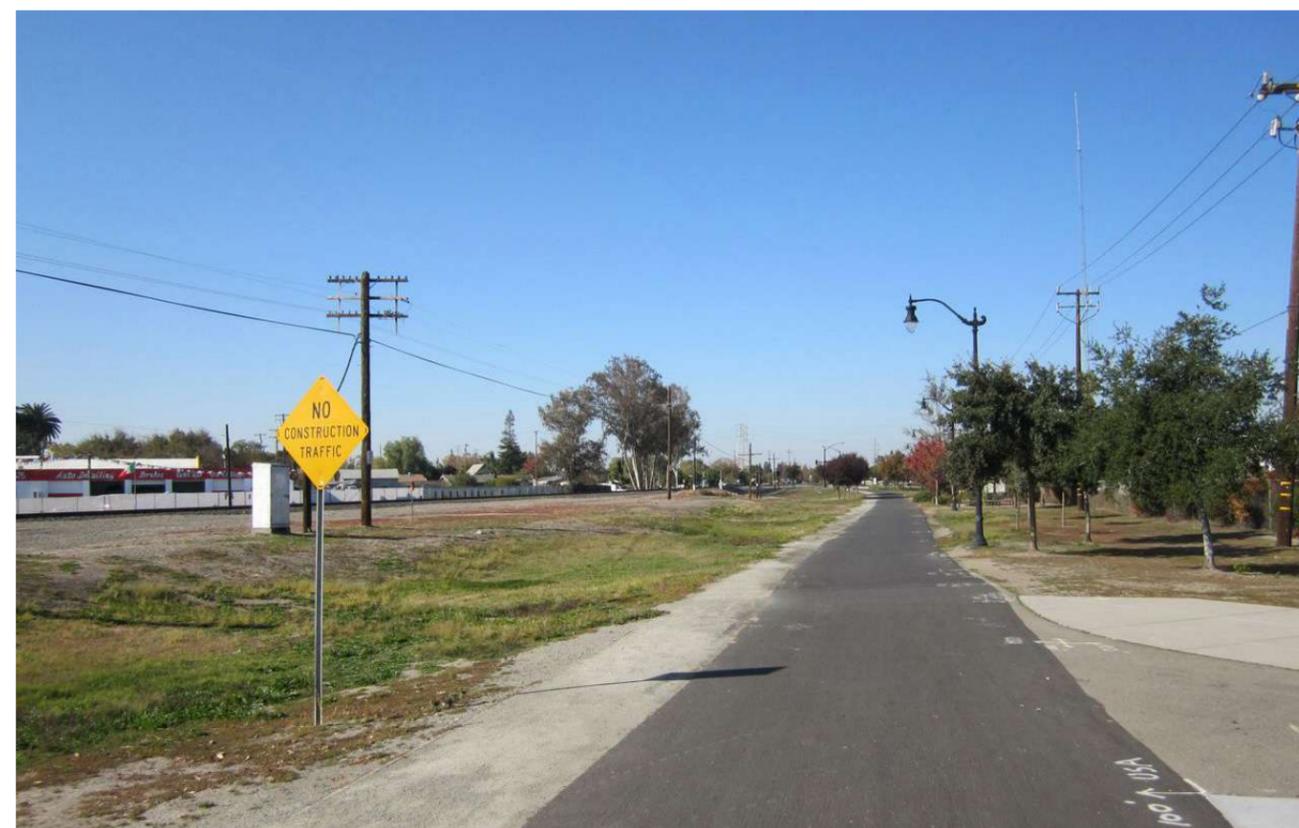


Bay Area To Central Valley
 Altamont Pass
 Page 2-E-74



Aerial from Google Earth Pro

Looking north along Tidewater Bikeway from Yosemite Avenue.
 Right-of way is approximately 160 to 180 feet wide.
 BA-CV Program Alignment - At grade in existing right-of-way



May 2008 Final Program EIR, Figure UP-4 (Page 2-E-128)

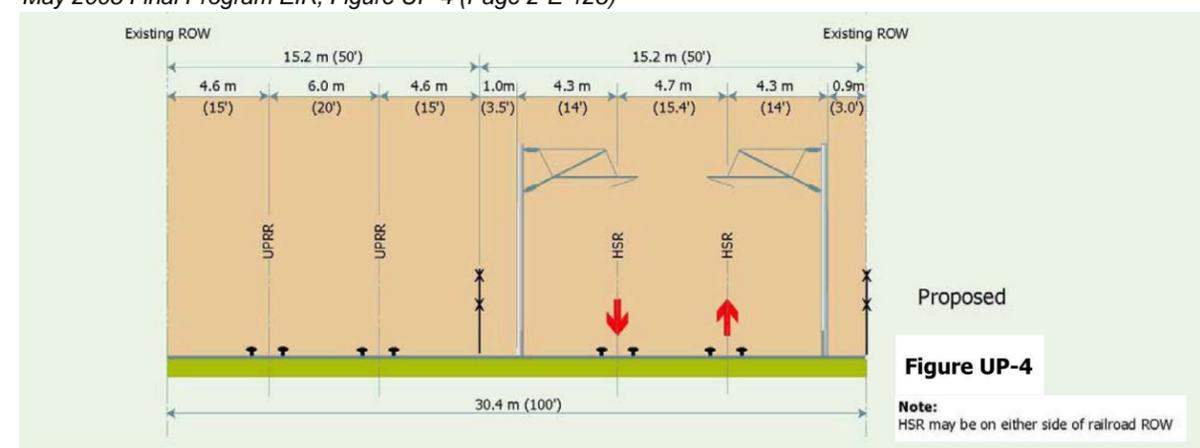
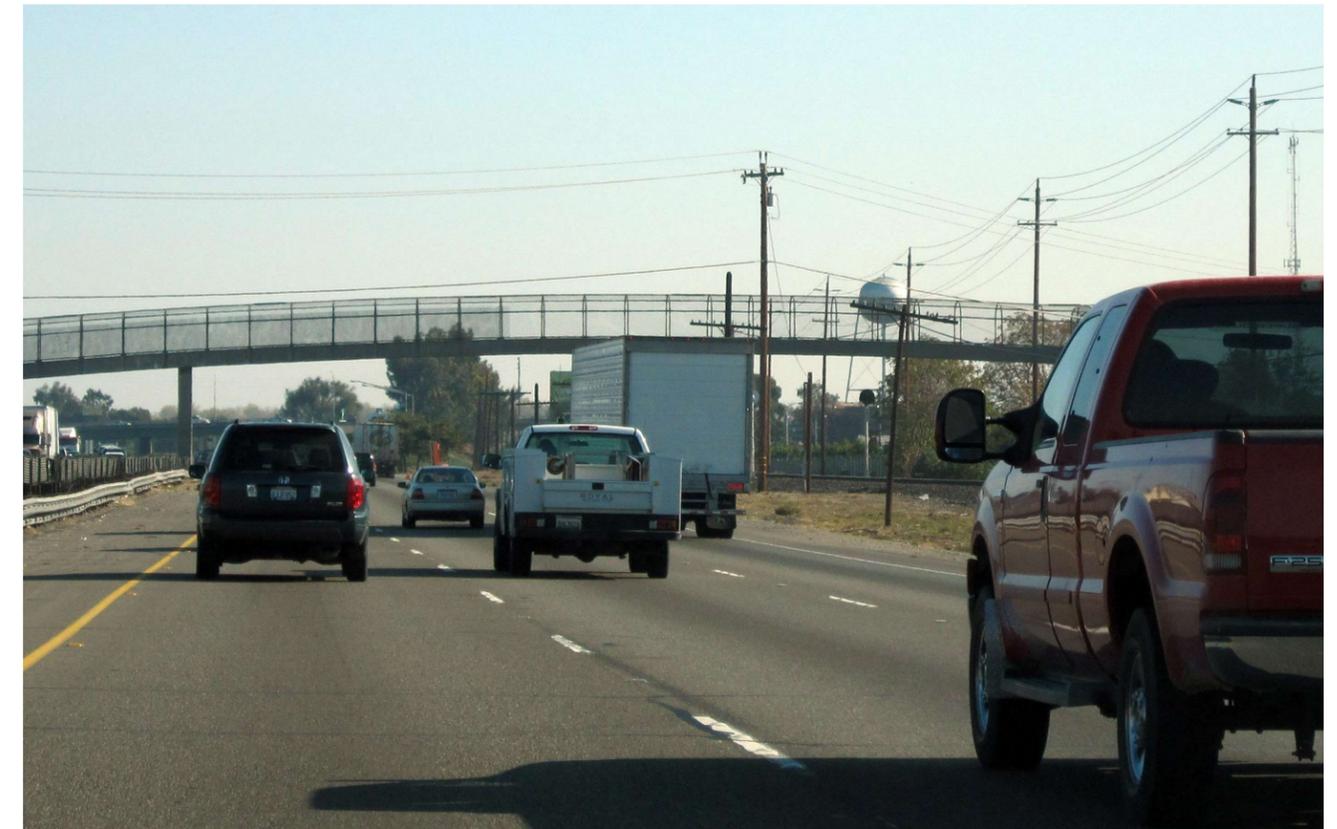


Figure UP-4

Note: HSR may be on either side of railroad ROW



Sacramento to Bakersfield
 UPRR Rail Line
 Typical At-Grade Mainline Section
 (Within Existing Railroad ROW)
 Page 2-E-128



Looking south on SR 99 in Ripon.

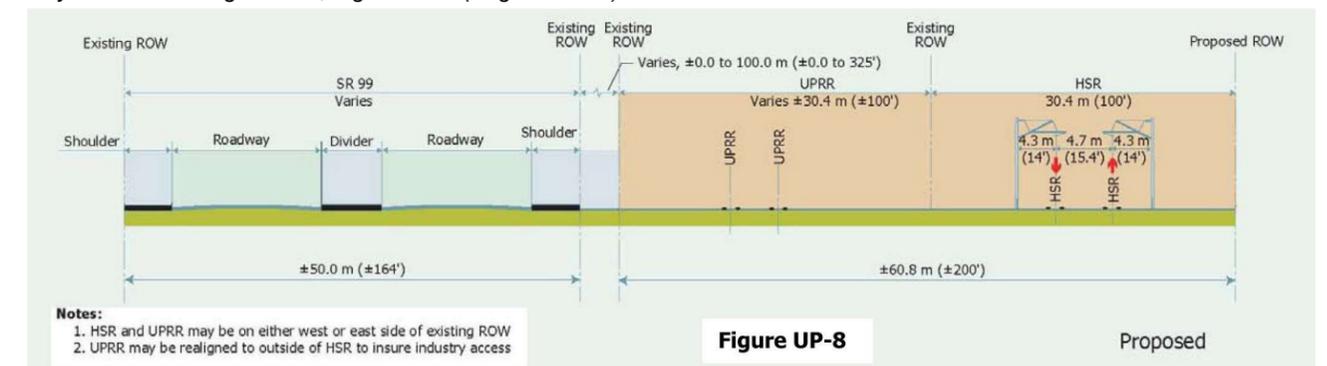
Acacia Avenue pedestrian overcrossing in foreground.

Railroad right-of-way to west (right) of freeway.

Right-of-way is approximately 100 feet wide.

BA-CV Program Alignment - At grade to the west of and outside the existing UPRR right-of-way

May 2008 Final Program EIR, Figure UP-8 (Page 2-E-132)



Sacramento to Bakersfield
UPRR Rail Line
Typical At-Grade Mainline Section
(Adjacent to SR-99)
Page 2-E-132



May 2008 Final Program EIR, Figure UP-S2 (Page 2-E-137)

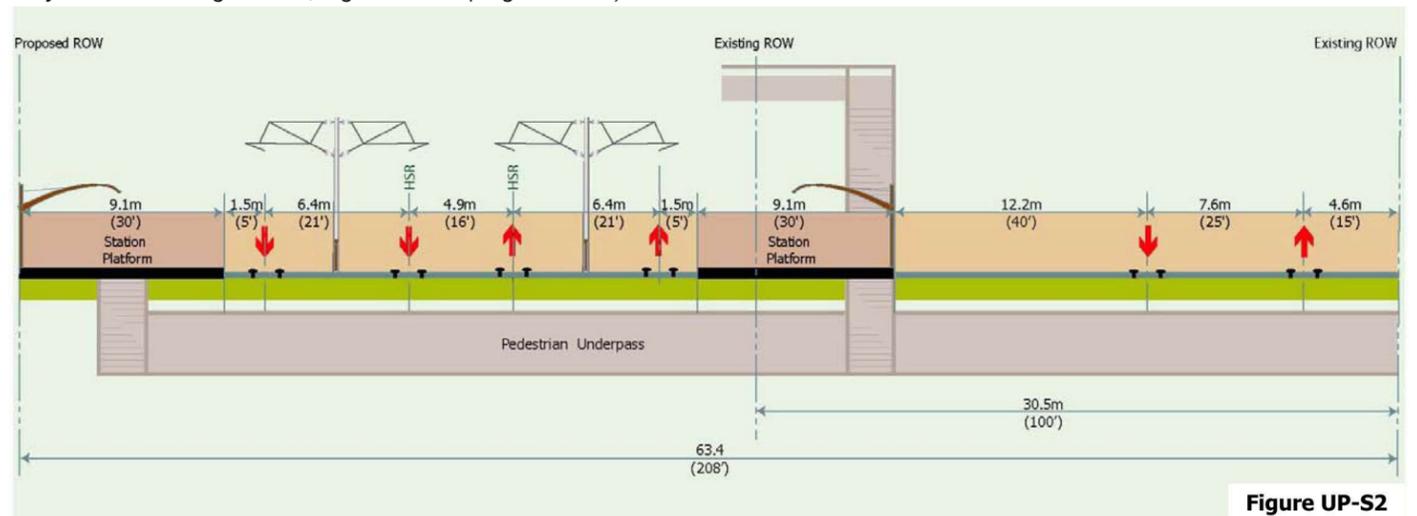
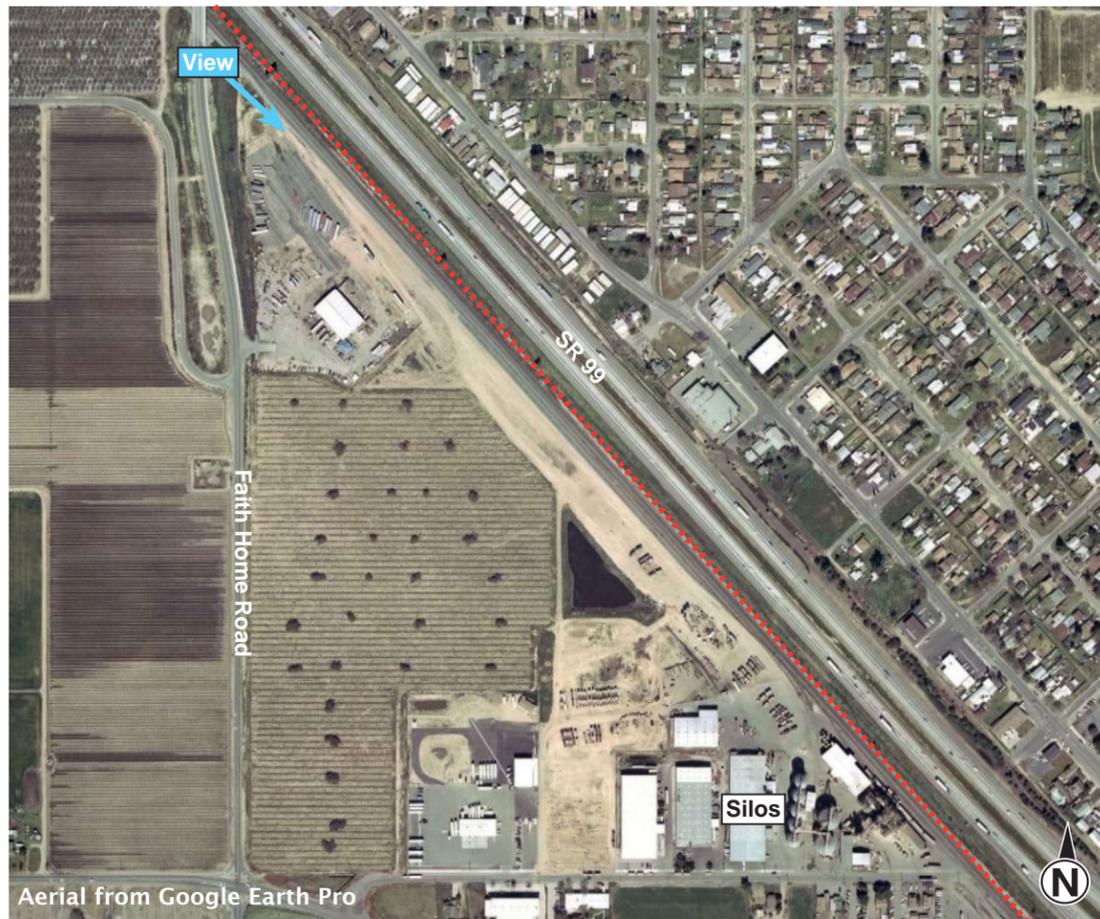


Figure UP-S2



Sacramento to Bakersfield
UPRR Rail Line
Modesto At-Grade Station
Page 2-E-137

Looking north from the Modesto Transit Center parking garage.
L Street (SR 132) grade crossing in foreground.
Right-of-way is approximately 120 feet wide.
BA-CV Program Alignment - At grade partially within the existing right-of-way

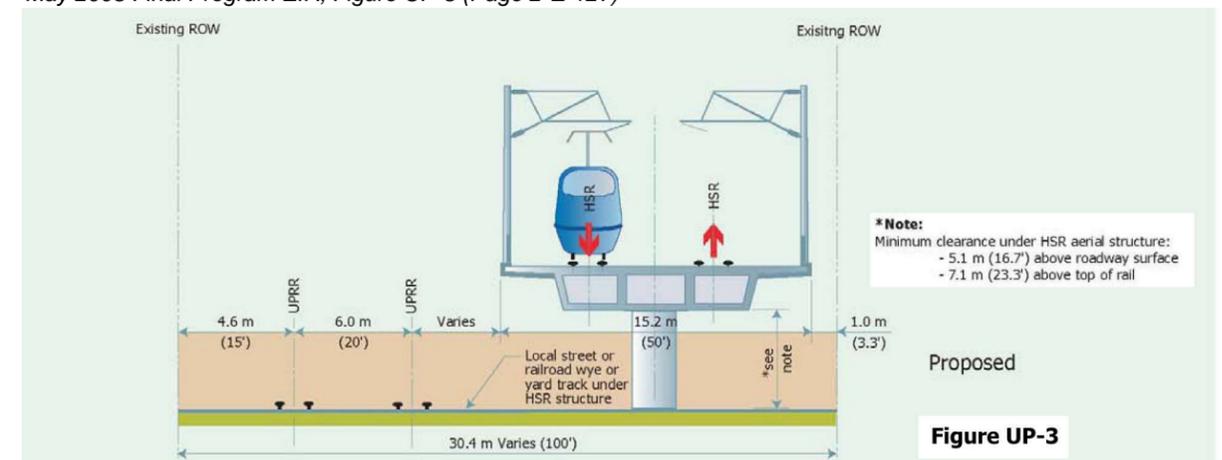


Aerial from Google Earth Pro

Looking south from the Faith Home Road overcrossing.
 L Street (SR 132) grade crossing in foreground.
 Right-of-way varies from approximately 100 to 200 feet wide.
 BA-CV Program Alignment - Aerial within existing right-of-way



May 2008 Final Program EIR, Figure UP-3 (Page 2-E-127)



***Note:**
 Minimum clearance under HSR aerial structure:
 - 5.1 m (16.7') above roadway surface
 - 7.1 m (23.3') above top of rail

Figure UP-3

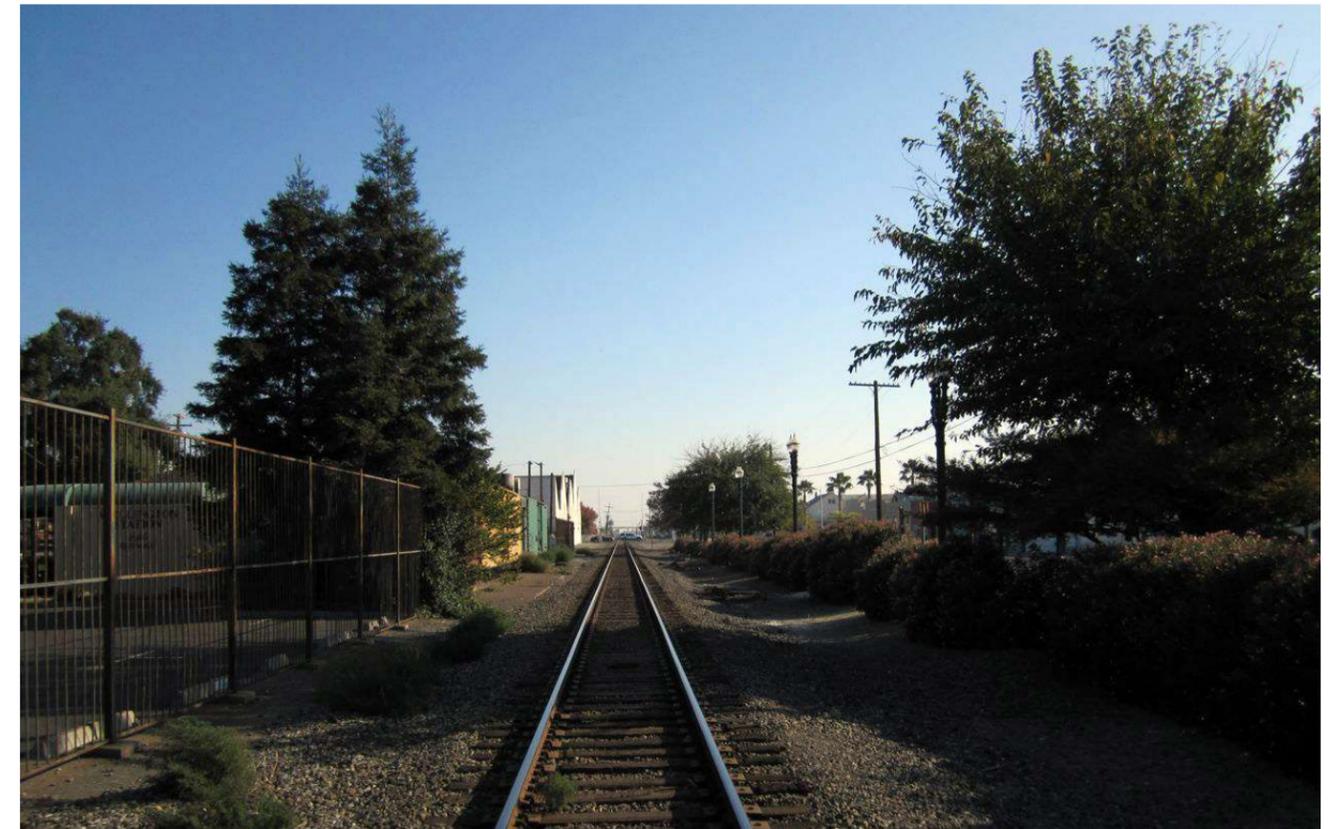


**Sacramento to Bakersfield
 UPRR Rail Line
 Typical Aerial Mainline Section
 (Flyover Highway or Railroad)
 Page 2-E-127**

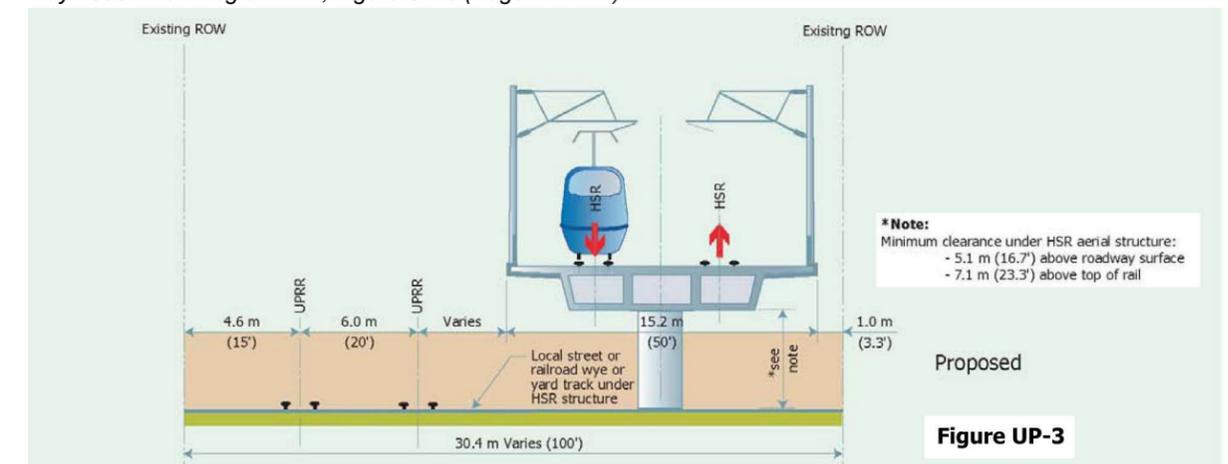


Aerial from Google Earth Pro

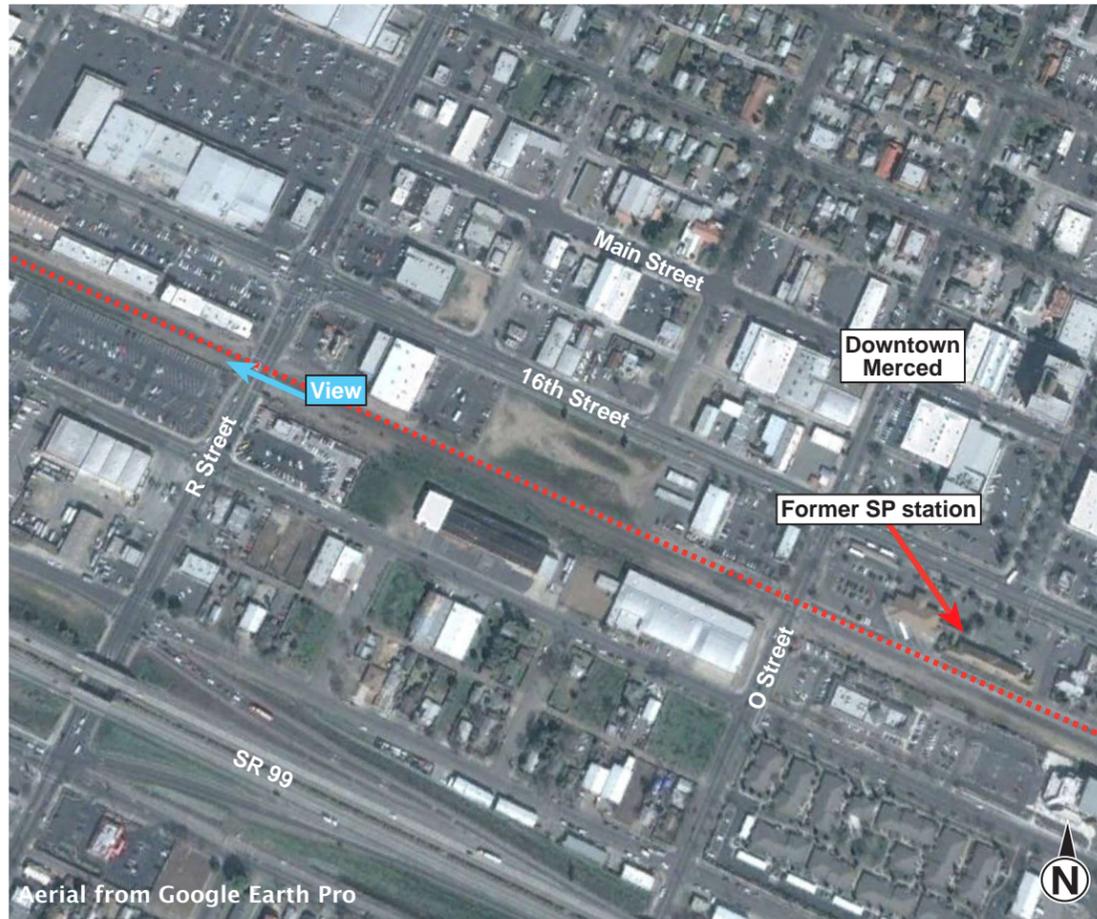
Looking south from the West Main Street grade crossing.
 Former Southern Pacific station to the east (left) in the middle ground.
 Right-of-way is approximately 50 feet wide.
 BA-CV Program Alignment - Aerial within existing right-of-way



May 2008 Final Program EIR, Figure UP-3 (Page 2-E-127)



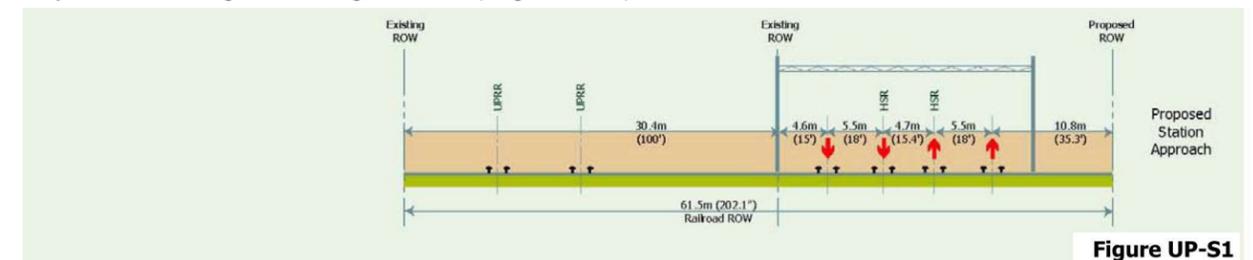
**Sacramento to Bakersfield
 UPRR Rail Line
 Typical Aerial Mainline Section
 (Flyover Highway or Railroad)
 Page 2-E-127**



Looking north from the R Street grade crossing.
 Right-of-way is approximately 95 feet wide.
 BA-CV Program Alignment - At-grade adjacent to existing right-of-way



May 2008 Final Program EIR, Figure UP-S1 (Page 2-E-136)



**Sacramento to Bakersfield
 UPRR Rail Line
 4-Track At-Grade
 Merced Downtown Station
 Page 2-E-136**



February 2010

**Figure 3-20
 Downtown Merced**
Bay Area to Central Valley HST Revised Draft Program EIR Materials

CHAPTER 4
IMPACTS TO UNION PACIFIC RAILROAD FREIGHT OPERATIONS

4 IMPACTS TO UNION PACIFIC RAILROAD FREIGHT OPERATIONS

4.1 Impacts on Union Pacific Railroad Freight Operations

This new chapter addresses how the No Project and HST alignment alternatives have the potential to affect the UPRR's freight operations. This chapter also addresses the potential for secondary environmental impacts that may occur if the Authority must implement design or mitigation strategies to avoid adversely affecting the UPRR's use of its right-of-way, rail spurs, and general freight operations. The purpose of this analysis is to examine how the physical environmental changes potentially created by HST alignment alternatives could affect the UPRR's physical freight operations directly or indirectly. Because CEQA does not treat economic changes as significant effects on the environment in and of themselves, this chapter focuses on the potential for physical changes to UPRR freight operations, rather than on the economic aspects of these changes.

The *Town of Atherton* court ruling identified the need for a revised analysis of potential impacts of the HST on UPRR freight operations in the stretch of alignment between San Jose and Gilroy. The following discussion is broader than San Jose to Gilroy to ensure the public and the decision makers have sufficient information to compare the alignment alternatives in each corridor. This information will contribute to an improved understanding of how the various network alternatives (i.e., combinations of alignment alternatives into an overall network) compare on this issue of impacts to UPRR freight operations.

For all of the alignment alternatives in the study area, it may be necessary to cross from one side of a private railroad's (e.g., UPRR's) mainline tracks and right-of way to the other. For these circumstances, the HST would go under (trench or tunnel) or fly over (aerial alignment) the private railroad's property and tracks providing adequate vertical and horizontal clearances as required by California Public Utilities Commission General Order 26-D and consistent with the private railroad's standards and procedures (Public Utilities Commission of State of California 1981, BNSF Railway–Union Pacific Railroad 2007).

Changes to the text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with ~~strikeout~~.

4.1.1 Method of Evaluation of Impacts

A. REGULATORY REQUIREMENTS

US Code - Title 49: Transportation - 49 U.S.C 10906 exempts some types of rail operations and transactions from the U.S. Department of Transportation, Surface Transportation Board (STB) regulations. This section states:

"Notwithstanding section 10901 and subchapter II of chapter 113 of this title, and without the approval of the (Surface Transportation) Board, a rail carrier providing transportation subject to the jurisdiction of the Board under this part may enter into arrangements for the joint ownership or joint use of spur, industrial, team, switching, or side tracks."

"The (Surface Transportation) Board does not have authority under this chapter over construction, acquisition, operation, abandonment, or discontinuance of spur, industrial, team, switching, or side tracks."

The current regulatory scheme governing abandonments and acquisitions to preserve service seeks to balance the needs of the shippers, railroads, and the ultimate customers. The STB has a formal process for considering abandonments and alternatives to abandonment of railroad track. The STB

has exempted the abandonment of out-of-service lines over which no local traffic has moved for at least 2 years without formal complaint about a lack of service. Where a line has generated traffic within the last 2 years, the railroad may seek to persuade the STB that an exemption is nevertheless appropriate for that individual line (STB 1997). These exemptions are widely used.

B. GENERAL METHOD OF EVALUATION

The impacts analysis was performed by examining the existing conditions along the various HST alignment alternatives and identifying existing rail spurs, junctions, and branches along the freight rail corridor utilizing aerial maps.

C. CEQA SIGNIFICANCE CRITERIA

For purposes of this Program EIR, impacts under CEQA are considered significant if the project would:

- Eliminate an existing rail spur that provides access to a freight customer without provision of replacement access.

4.1.2 Affected Environment

A. STUDY AREA DEFINED

The study area for this analysis is defined as locations where the HST was proposed to run in or immediately adjacent to an active railway right-of-way owned by the UPRR. These locations are described in Chapter 3, section 3.2.2. Figure 4-1 provides a view of a typical spur track or siding.

**Figure 4-1
Typical Spur Track or Siding**



B. EXISTING UPRR RAIL SPURS AND JUNCTIONS BY HST CORRIDOR

Discussed below and listed in Table 4-1 are the number of existing rail spurs and junctions along the UPRR line within the HST corridors.

**Table 4-1
 Existing Spurs and Junctions along the UPRR Lines**

HST Corridor	Spurs/Junctions along UPRR Lines
San Francisco to San Jose Corridor	19
Oakland to San Jose Corridor (19th Avenue in Oakland to Mission Boulevard in Fremont)	18
San Jose to Central Valley Corridor (Diridon Station in San Jose to south of Gilroy)	10
East Bay to Central Valley Corridor (Fremont to Lathrop, via Livermore and Tracy)	16
San Francisco Bay Crossings (Dumbarton line west of San Francisco Bay; Newark and Fremont east of San Francisco Bay)	4 – west of San Francisco Bay 4 – east of San Francisco Bay
Central Valley Corridor (Stockton to Fresno County)	35

San Francisco to San Jose Corridor

Between San Francisco and San Jose, there are 19 freight leads and spurs.

Oakland to San Jose Corridor

From 19th Avenue in Oakland to Mission Boulevard in Fremont, 18 spurs and junctions were identified along the UPRR corridor.

San Jose to Central Valley Corridor

From Diridon Station in San Jose to south of Gilroy, 10 spurs were identified along the UPRR corridor.

East Bay to Central Valley Corridor

From Fremont to Lathrop, via Livermore and Tracy, 16 spurs or junctions were identified.

San Francisco Bay Crossings

On the Dumbarton line, west of the bay, four spurs exist. East of the bay, in Newark and Fremont, there is one spur but three junctions with the UPRR.

Central Valley Corridor

From Stockton to Fresno County, along the UPRR, there are 35 junctions and spurs.

4.1.3 Environmental Consequences

A. NO PROJECT ALTERNATIVE

Under the No Project Alternative, it is assumed that the UPRR would continue to maintain and utilize its existing rail spurs. Based on written communications UPRR has provided to the Authority, it is also assumed that UPRR would seek to expand its freight operations by constructing additional spurs or improving existing spurs. As part of this study, it was not possible to specifically identify or quantify improvements that UPRR expects to implement by 2030.

B. HIGH-SPEED TRAIN ALIGNMENT ALTERNATIVES

San Francisco to San Jose Corridor

It is the intent of the HST program that UPRR would retain its current trackage rights in this corridor, and that the future use of the spurs would not be precluded. In areas such as South San Francisco where it may be necessary to relocate the UPRR's yard operations, additional right-of-way outside of the existing Caltrain corridor may be required. It is intended that the current utility would be maintained for freight operations. UPRR rail spurs would most likely be reconfigured to remain within the existing Caltrain or UPRR right-of-way on the corridor. Minor additional strips of right-of-way may be required to accommodate the freight spur moves.

Oakland to San Jose Corridor

In this corridor, 18 spurs and junctions were identified along the UPRR between 19th Avenue in Oakland and Mission Boulevard in Fremont. HST runs on the east side of the UPRR in this corridor, so eight spurs and junctions on the west side of the UPRR would not be affected by HST.

On the east side, there are four locations in Oakland and two in Union City where there are existing spurs or sidings off the east side of the UPRR that would be affected by the HST. The Oakland conflicts occur over three miles between High Street and 98th Avenue, where the HST would run at grade. The Union City spurs are very close together, near the existing Union City BART Station. The remaining locations, two rail junctions near the mouth of Niles Canyon in Fremont, and the New United Motor Manufacturing, Inc. (NUMMI)/Warm Springs Yard in Fremont, the HST alignment would be elevated and therefore not interfere with the UPRR tracks, which would remain at grade.

San Jose to Central Valley Corridor

Ten spurs were identified in this corridor, all located between Diridon Station in San Jose and just south of Gilroy, near Carnadero Junction. The HST alignment would run west of the existing Caltrain/UPRR tracks to the Caltrain Tamien Station, and east of the existing tracks to Lick, in the Caltrain/PCJPB-owned right of way from Diridon Station to Lick. In crossing over freight and passenger tracks the HST would be on an aerial alignment with no interference to the existing tracks. At Lick, which is the beginning of the UPRR ownership of the right-of-way, the HST alignment would run adjacent to the east side of the UPRR right-of-way. This alignment would be on aerial structure to pass over a spur in Morgan Hill and three in Gilroy, but run at grade across one spur north of Gilroy, severing it from the UPRR.

East Bay to Central Valley Corridor

This corridor has three areas where the HST could affect UPRR freight services. The first is the corridor between I-680 in Pleasanton and Livermore on the UPRR alignment alternative. In this area, there are 5 spurs or other facilities. Along Stanley Boulevard, the UPRR serves a large quarry and maintains long siding parallel to the mainline. The HST alignment would be at grade in this area, to the east of the UPRR right-of-way, so it would conflict with the spur for the quarry. Moving east, there is a short spur in downtown Livermore and two industrial spurs in East Livermore, near Vasco Road. These spurs are shown in Figures 4-2 and 4-3. The HST would also conflict with these spurs.

In the Tracy area, there are two potential HST alignment alternatives. Along the Tracy Downtown (UPRR Connection) alignment alternative, there are six spurs and junctions. Five fall within a mile near the proposed Tracy downtown station, but only one conflicts with the HST, which would be on the north side of the UPRR. This is the North Tracy Industrial Spur, near MacArthur Avenue. Another conflict occurs in south Lathrop, where the HST S UPRR alignment alternative would cross a short freight spur. On the Tracy ACE Station alignment alternative, which passes south of the City of Tracy, the HST would cross the junction with the Westside Branch (Figure 4-4), but there would be no conflict as the HST alignment would be grade separated from the freight line.

**Figure 4-2
Livermore Spur**



**Figure 4-3
East Livermore Industrial Spur**



Figure 4-4
Westside Branch Junction in Tracy



The Tracy Downtown (UPRR Connection) alignment alternative passes a small rail yard east of downtown Tracy (Figure 4-5). It is possible that the yard would need to be reconfigured to accommodate the HST as it passes to eliminate the need to acquire additional right-of-way.

San Francisco Bay Crossings Corridor

This corridor has two distinct conditions. From the Caltrain mainline at Redwood Junction to Newark, the right-of-way is owned by the San Mateo County Transportation District and freight service would be operated under the same conditions as along the PCJPB owned line on the peninsula for any freight users on the west side of San Francisco Bay. On the east side of the bay, the Dumbarton alignment alternative would avoid conflicts with UPRR freight by passing over UPRR tracks where they intersect.

Central Valley Corridor

The Central Valley UPRR N/S alignment alternative, from Stockton to Fresno County would follow the UPRR and SR-99 for its entire distance. It would generally run at grade on the west side of the UPRR, but crosses to the east side near the junction with the line running east-west in Chowchilla. There are about 35 locations where a junction or spur leaves the UPRR mainline. In about half the cases, the HST alignment would run on the same side of the UPRR, but in Keyes, Turlock, Atwater, Chowchilla and Madera, the HST would be elevated to alleviate conflicts with the freight operations, leaving only spurs in French Camp (1), Ripon (2), Salida, Downtown Modesto (3), the junction with a branch line just south of Modesto, an industrial spur in south Chowchilla, north Madera and south of downtown Madera in conflict with the HST. The remaining half of the spurs and junctions would be on the opposite side of the UPRR mainline from the HST alignment. Figure 4-6 shows a silo served by a spur from the UPRR. The HST alignment would be elevated to pass over the spur, allowing uninterrupted access from the mainline to the facility.

**Figure 4-5
Tracy Rail Yard**



**Figure 4-6
Spur Serving Large Silo along UPRR**



4.1.4 Role of Design Practices in Avoiding and Minimizing Effects

Safe and efficient freight rail services are important to the state and national economy. While locating the HST system along existing transportation corridors minimizes environmental impacts, the HST system design must also be sensitive to adjacent freight rail systems. The Authority intends to design the HST system to avoid interfacing with the UPRR freight rail system where reasonably practicable under the circumstances. In areas where avoidance is not feasible due to geographic, economic, or other constraints, the Authority intends to design the HST system in a manner that provides the highest degree of compatibility as is practicable under the circumstances. The Authority plans to avoid and/or minimize creating adverse impacts for UPRR freight operations by adhering to the following design practices in the project-level planning and environmental review process:

- HST alignments will be designed so as not to be located on affect UPRR operating rights of way where feasible. ens on its main lines, leads, and spurs. Specifically, HST alignments will be grade separated from UPRR rights-of-way at those locations where HST alignments would need to cross over or under UPRR operating rights-of-way.
- HST alignments will be designed to minimize impacts to existing UPRR business-serving spurs where feasible. The Authority will work with UPRR to identify for those locations where design of the HST alignment may affect these business-serving spurs and evaluate with UPRR the following options, and other options that UPRR may present: The following options will be jointly evaluated in concert with the UPRR:
 - The HST alignment will be grade-separated (trench, tunnel, or aerial) from the UPRR spur.
 - ~~The Authority will negotiate with the UPRR to acquire the business serving spur.~~
 - If possible, the spur will be reconstructed so as to reduce or eliminate the impact of HST operations on existing freight service not to interfere with HST operations.
 - the Authority will negotiate with UPRR and consider such options as may be suggested by UPRR to accommodate individual freight customer needs.

With regard to the business implications of acquiring properties adjacent to the railroad operating rights-of-way that may prohibit or reduce the likelihood of future business-serving spurs and associated potential business opportunities for UPRR, the Authority is fully aware that there currently is no prohibition to acquiring property adjacent to existing privately-owned railroad rights-of-way in accordance with all state and federally mandated safety laws and FRA implementing regulations.⁺ UPRR will retain authority to serve those businesses on properties or track rights-of-way owned by the UPRR.

4.1.5 Mitigation Strategies and CEQA Significance Conclusions

Based on the analysis above, and considering the design practices described above, the HST alignment alternatives are not expected to result in significant adverse effects to UPRR freight operations. At the program level, however, sufficient uncertainty exists about the precise design practices to avoid impacts and their effectiveness across all portions of the alignment alternatives that this impact must be considered potentially significant out of an abundance of caution. The following types of mitigation strategies will avoid or reduce impacts:

- Construct grade separation in the form of an HST aerial flyover or underpass to preserve access to existing rail spurs and branch lines.

⁺~~The Authority understands that it must comply with the Federal Railroad Administration's and the State of California Public Utility Commission's provisions regarding the safety associated with a shared corridor.~~

- Consolidate consecutive spur tracks that occur over a short distance to minimize the need for multiple grade separations.
- Relocate team tracks (Figure 4-7) to the opposite side of the UPRR in locations where they conflict with HST. A team track is a small railroad siding or spur track intended for the use of area merchants, manufacturers, farmers and other small businesses to personally load and unload products and merchandise, usually in smaller quantities.
- For silo or quarry operations, provide new loading/unloading facilities with augers and conveyors that pass over or under the HST alignment to a siding on the UPRR mainline that alleviates the need for a UPRR spur to cross the HST.
- To the extent possible, the schedule for construction will be coordinated with existing rail operators to minimize impacts to existing operations.

These strategies, in concert with ongoing negotiations with UPRR, are expected to ensure that the HST alignment alternatives will not result in adverse impacts to UPRR freight operations.

4.1.6 Secondary Environmental Impacts From Avoiding/Mitigating Effects on UPRR Freight Operations

Avoidance and/or mitigation measures will be further refined as part of future project-level design and analysis. Avoiding or mitigating impacts to UPRR freight operations, such as by a grade separation, could in itself result in secondary environmental impacts. There may be the need to acquire additional property which could contain sensitive resources such as biological, cultural, and water resources or construction could disturb hazardous materials and utilities. The acquisition of property may result in the displacement and relocation of businesses and residences or result in conversion of agricultural land. New grade separations could also result in visual, noise, and vibration impacts. Construction of avoidance alternatives or implementation of mitigation measures could also result in dust or other air emissions as well as noise and vibration impacts. Such impacts will be examined in detail at the project level because they are a product of the HST system design, and the detail necessary to identify the presence of the impact, the level of significance, and mitigation can only be done at the project level. Refer to Chapters 3 of the May 2008 Final Program EIR for a discussion of the types of mitigation strategies to be utilized to mitigate secondary impacts.

4.1.7 Subsequent Analysis

This analysis is programmatic and addresses generally how the HST alignment alternatives might affect UPRR freight operations and how the Authority can take steps to ensure UPRR's freight operations are not affected adversely. Subsequent planning and project-level environmental documents will identify the precise proposed engineering designs and analyze in more detail how the Authority proposes to avoid adverse effects to UPRR facilities and services and what environmental effects may occur from taking such steps.

Figure 4-7
Typical Team Track Facility



CHAPTER 5
COSTS AND OPERATIONS

5 COSTS AND OPERATIONS

5.1 Introduction

The following text replaces that contained in Chapter 4 of the 2008 Final Program EIR related to estimated capital costs resulting from changes to the San Jose to Gilroy portion of the Central Valley Corridor (Chapter 2) and the San Francisco to San Jose Corridor (Chapter 3). The changes to estimated capital costs in these two corridors result in changes to estimated costs for the Altamont Pass Network Alternatives, Pacheco Pass Network Alternatives, and Pacheco Pass with Altamont Pass (local service) Alternatives that have alignments in these corridors. The revised capital costs do not result in revisions to the operations and maintenance (O&M) costs identified in section 4.3 of the 2008 Final Program EIR. There are no changes to this text between the Revised Draft Program EIR and the Revised Final Program. Only those tables requiring revisions are included below, all other tables in Chapter 4 of the 2008 Final Program EIR did not require any revisions.

5.2 Revised Capital Costs

Capital costs for HST Alignment Alternatives and station location options were estimated in 2006 dollars. The costs are associated with HST-related infrastructure improvements only. The programmed and funded improvements included under the No Project Alternative are assumed to have been implemented by 2020, regardless of proposed HST implementation.

Capital costs were estimated for all proposed HST Alignment Alternatives and station location options evaluated in this Program EIR/EIS (Tables 4.2-1 and 4.2-2 in the 2008 Final Program EIR). Costs also were aggregated for each representative network alternative, as identified in Chapter 2 of the 2008 Final Program EIR and compared in Chapter 7 of the 2008 Final Program EIR. Some alignments (horizontal and vertical) and station configurations previously considered have evolved since preparation of the Statewide Program EIR/EIS, and therefore costs also have changed (Table 5-1). The proposed alignment alternatives and station location options selected in this program review would be further evaluated at the project level to identify cost savings through application of value engineering practices.

The capital costs are representative of all aspects of implementation of the proposed HST system, including construction, right-of-way, environmental mitigation, and design and management services. The construction costs include procurement and installation of line infrastructure (e.g., tracks, bridges, tunnels, grade separations, and power distribution); facilities (e.g., passenger stations and storage and maintenance facilities); systems (e.g., communications and train control); and removal or relocation of existing infrastructure (e.g., utilities and rail tracks). The right-of-way costs include the estimated costs to acquire properties needed for construction of the HST infrastructure. The environmental mitigation costs include a rough estimate of the proportion of the capital cost required for mitigating environmental impacts, based on similar completed highway and rail line construction projects. No specific mitigation costs are identified at this program level of review. Agency costs associated with administration of the program (e.g., design, environmental review, and management) are estimated in terms of add-on percentages to construction costs.

For the San Jose to Central Valley Corridor, the capital cost for traffic mitigation was developed for full reconstruction of 14.3 miles of Monterey Highway between the proposed San Jose Diridon Station and Morgan Hill on an offset alignment.¹ At the program level, the reconstruction of Monterey Highway was

¹ The pricing was proportioned for replacement in kind of two and four lane roadway. Pricing used to prepare the composite unit price for reconstruction of Monterey Highway was from Caltrans District 4 2009 actual project bid prices then de-inflated to Year 2006.

estimated to be \$118,363,257 in 2006 dollars. The 2008 Final Program EIR accounted for buying a 50-foot right-of-way for the full length from San Jose to Gilroy, so there is no change needed in right-of-way acquisition costs.

As discussed in Chapter 3, the HST alignment in the San Francisco to San Jose Corridor is assumed to be configured in a mix of at-grade, elevated and below grade vertical profiles predominately in the PCJPB right-of-way. There are cities where the available PCJPB right-of-way is known to be particularly narrow (less than 100 feet). Cities that are known to have narrow Caltrain rights-of-way include Millbrae, San Mateo, Redwood City, Atherton, Menlo Park, Palo Alto, Mountain View and Sunnyvale. In these locations, the PCJPB right-of-way would not be sufficiently wide enough to accommodate all four tracks and at the program level would result in the need to acquire up to approximately 10 acres of additional adjacent property at various locations between San Francisco and San Jose. The potential acquisition of 10 acres would increase the total cost of the San Francisco to San Jose section by approximately \$16,500,000 in 2006 dollars.

The estimated total capital costs for each individual alignment alternative are presented in Appendix 4-A in the 2008 Final Program EIR. The individual station location costs are presented in Appendix 4-B in the 2008 Final Program EIR.

As defined in Chapter 2 in the 2008 Final Program EIR, the HST Network Alternatives represent different ways to combine HST Alignment Alternatives and station location options to implement the HST system in the study region. The estimated capital costs for each network alternative are presented in Table 4.2-3 in the 2008 Final Program EIR and updated below in Table 5-2 for the Altamont Pass network alternatives, the Pacheco Pass network alternatives, and the Pacheco Pass with Altamont Pass (Local Service) network alternatives. Only the network alternatives that include the San Francisco to San Jose and San Jose to Central Valley corridors show revisions. The breakdown of these costs by the alignment alternatives and alignment segments that comprise each network alternative are presented in Appendix 4-C in the 2008 Final Program EIR.

Because of the variations in alignment alternatives and station location options being considered in the program EIR/EIS process, there is a potential range of capital costs associated with any given network alternative.

The capital costs have been categorized into discrete cost elements. In general, the capital costs were estimated by determining the appropriate unit costs for the identified cost elements and the cost element quantities from conceptual alignment alternative and station location option plans prepared for each alignment alternative (Appendices 2-E, 2-F, and 2-G in the 2008 Final Program EIR). Each cost element is defined in Appendix 4-D in the 2008 Final Program EIR, along with the methods, assumptions, and description of the unit cost applied in each case.

The unit costs were reviewed as part of previous studies by HST owners, operators, and manufacturers, various agencies, and consultants. Formal peer reviews of the Authority's Corridor Evaluation were also conducted. Application of these unit costs and assumptions is consistent with past studies for the HST, including the Business Plan, and provides sufficient detail for the comparison of alignment alternatives and station location options at this program level. The unit costs for all individual elements are presented in Table 4.2-4 in the 2008 Final Program EIR. The unit costs were adjusted to account for inflation from September 2003 to November 2006, based on the Engineering News Record Construction Cost Index Report (McGraw-Hill Construction ENR 2007). Unit costs for the Oakland to San Francisco transbay tube, Dumbarton rail bridge (high-bridge and low-bridge options), and Dumbarton tube were obtained from MTC as part of the Regional Rail planning studies.

5.3 Operations and Maintenance Costs (page 4-19)

No revisions or additions required.

Table 5-1
Revised Table 4.2-1—High-Speed Train Alignment Alternatives Capital Cost (in 2006 dollars),
Including Contingencies and Program Implementation Cost

Alignment Alternative by Corridor and Segment	Length		Average Cost (in dollars)		Cost (in dollars)
	Km	Miles	Per Km	Per Mile	
San Francisco to San Jose Corridor: Caltrain					
<i>San Francisco to Dumbarton</i>	44.58	27.70	49,341,494	79,409,524	2,199,643,821
Transbay Transit Center to 4 th /Townsend (Caltrain 1)	2.50	1.55	159,522,378	256,726,381	398,805,944
4 th /Townsend to Millbrae/SFO (Caltrain 2)	22.58	14.03	45,370,724	73,020,025	1,024,470,948
Millbrae/SFO to Redwood City (Caltrain 3)	18.75	11.65	37,863,142	60,938,533	709,933,904
Redwood City to Caltrain (Caltrain 4)	0.75	0.47	88,577,366	142,551,453	66,433,025
<i>Dumbarton to San Jose</i>	34.40	21.38	39,622,660	63,752,082	1,363,019,506
Caltrain Dumbarton Wye (Caltrain 5)	1.62	1.01	24,593,435	39,579,297	39,865,958
Dumbarton Wye to Palo Alto (Caltrain 6)	5.23	3.25	50,561,503	81,365,126	264,436,659
Palo Alto to Santa Clara (Caltrain 7)	22.55	14.01	26,431,829	42,543,737	596,037,750
Santa Clara to Diridon Station (Caltrain 8)	5.00	3.11	92,535,828	148,921,979	462,679,139
Station Location Options					
Transbay Transit Center (Terminal Option)					786,262,418
4 th and King (Caltrain) (Terminal Option)					791,939,278
Millbrae/SFO					29,076,600
Redwood City (Caltrain)					67,516,558
Palo Alto (Caltrain)					67,516,558
San Jose to Central Valley Corridor: Pacheco Pass					
<i>Pacheco</i>	92.50	57.48	40,080,330	64,499,487	3,707,430,512
Diridon to Morgan Hill (Pacheco 1)	32.50	20.19	22,716,128	36,566,328	780,281,422
Morgan Hill to Gilroy (Pacheco 2)	16.00	9.94	23,730,117	38,189,921	379,681,864
Gilroy to San Luis Reservoir (Pacheco 3)	44.00	27.34	57,896,982	93,176,161	2,547,467,226

Alignment Alternative by Corridor and Segment	Length		Average Cost (in dollars)		Cost (in dollars)
	Km	Miles	Per Km	Per Mile	
<i>Henry Miller (UPRR Connection)</i>	100.89	62.69	13,489,349	21,709,003	1,360,872,958
San Luis Reservoir to Valley Floor (Pacheco 4)	15.45	9.60	27,554,846	44,345,226	425,722,369
Western Valley to Henry Miller UP Wye (HM-1)	58.05	36.07	10,870,134	17,493,785	630,967,784
Henry Miller UP North Wye to UP South Wye (HM-2)	8.19	5.09	11,200,428	18,025,342	91,720,307
Henry Miller Wye North to UPRR (HM/UP-XN)	11.25	6.99	11,845,555	19,063,573	133,262,493
Henry Miller Wye South to UPRR (HM/UP-XS)	7.95	4.94	9,962,265	16,032,711	79,200,005
<i>Henry Miller (BNSF Connection)</i>	104.70	65.06	13,324,586	21,443,843	1,395,030,861
San Luis Reservoir to Valley Floor (Pacheco 4)	15.45	9.60	27,554,846	44,345,226	425,722,369
Western Valley to Henry Miller UP Wye (HM-1)	58.05	36.07	10,870,134	17,493,785	630,967,784
Henry Miller UP North Wye to UP South Wye (HM-2)	8.19	5.09	11,200,428	18,025,342	91,720,307
Henry Miller UP South Wye to BNSF Wyes (HM-3)	4.62	2.87	11,920,369	19,183,975	55,012,505
Henry Miller Wye North to BNSF (HM/BN-XN)	8.70	5.40	13,137,656	21,143,007	114,245,054
Henry Miller Wye South to BNSF (HM/BN-XS)	9.70	6.03	7,975,551	12,835,405	77,362,843
<i>GEA North</i>	80.25	49.87	16,775,455	26,997,477	1,346,230,241
San Luis Reservoir to Atwater Wye (GEA-1A)	47.70	29.64	12,125,069	19,513,408	578,365,814
GEA Wye to Atwater (GEA-1B)	9.30	5.78	7,483,268	12,043,153	69,594,395
GEA Wye to Arena (SR-99) (GEA XN-1)	10.85	6.74	13,768,794	22,158,725	149,350,104
Arena (SR-99) to Ballico West (GEA XN-2)	8.57	5.33	10,530,597	16,947,353	90,247,214
Arena (SR-99) to Ballico North (GEA XN-3)	9.40	5.84	22,965,148	36,958,823	215,941,283
GEA Atwater Wye South to Merced UP (GEA-UPRR XS)	11.10	6.90	27,186,344	43,752,180	301,768,423
Station Location Options					
San Jose (Diridon)					185,051,790
Morgan Hill (Caltrain)					284,985,295
Gilroy (Caltrain)					148,256,045

Table 5-2
Revised Table 4.2-3—High-Speed Train Network Alternatives Cost Summary (in 2006 dollars)

		Stations	Segment Length		Average Total Cost (dollars)		Cost (dollars)		
No.	Network Alternative		Km	Miles	Per Km	Per Mile	Segment	Station	Total
A		ALTAMONT PASS							
1	San Francisco and San Jose Termini	S2, S5, S6, S7, S12, S15, S21, S25, S27	327.24	203.34	38,903,275	62,607,985	10,980,278,974	1,750,428,628	12,730,707,602
2	Oakland and San Jose Termini	S3, S5, S9, S10, S15, S21, S25, S27	293.17	182.16	34,208,979	55,054,015	8,575,425,642	1,453,483,850	10,028,909,492
3	San Francisco, Oakland, and San Jose Termini	S2, S3, S5, S6, S7, S9, S10, S15, S21, S25, S27	388.12	241.16	38,805,787	62,453,566	12,724,962,651	2,336,339,425	15,061,302,076
4	San Jose Terminus	S5, S12, S15, S21, S25, S27	257.78	160.18	29,863,432	48,060,536	6,830,741,966	867,573,053	7,698,315,019
5	San Francisco Terminus	S2, S6, S7, S11, S15, S21, S25, S27	308.27	191.55	35,753,861	57,540,291	9,303,190,731	1,718,652,058	11,021,842,789
6	Oakland Terminus	S3, S9, S10, S15, S21, S25, S27	274.97	170.86	29,700,584	47,798,456	6,898,337,399	1,268,432,060	8,166,769,459
7	Union City Terminus	S10, S15, S21, S25, S27	254.16	157.93	23,423,990	37,697,258	5,357,942,113	595,499,153	5,953,441,266
8	San Francisco, and San Jose—via SF Peninsula	S2, S5, S6, S8, S11, S15, S21, S25, S27	343.27	213.30	36,654,742	58,989,860	10,678,769,372	1,903,703,848	12,582,473,220
9	San Francisco, San Jose, and Oakland—with no San Francisco Bay Crossing	S2, S3, S5, S6, S7, S9, S10, S15, S21, S25, S27	393.81	244.70	36,754,852	59,151,730	12,138,088,969	2,336,339,425	14,474,428,394
10	Oakland, and San Francisco—via Transbay Tube	S2, S3, S9, S10, S15, S21, S25, S27	289.11	179.64	44,670,632	71,890,413	10,860,031,797	2,054,694,478	12,914,726,275
11	San Jose, Oakland and San Francisco—via Transbay Tube	S2, S3, S5, S9, S10, S15, S21, S25, S27	320.44	199.11	46,114,588	74,214,235	12,537,120,041	2,239,746,268	14,776,866,308
P		PACHECO PASS							
1	San Francisco and San Jose Termini	S2, S5, S6, S8, S23, S26, S27	430.55	267.53	28,084,758	46,807,621	11,163,423,252	1,359,019,515	12,522,442,767

		Stations	Segment Length		Average Total Cost (dollars)		Cost (dollars)		
No.	Network Alternative		Km	Miles	Per Km	Per Mile	Segment	Station	Total
2	Oakland and San Jose Termini	S3, S5, S9, S10, S23, S26, S27	413.40	256.87	28,259,945	45,480,832	10,463,711,366	1,218,949,918	11,682,661,284
3	San Francisco, Oakland and San Jose Termini	S2, S3, S5, S6, S8, S9, S10, S23, S26, S27	498.26	309.60	32,369,005	52,093,605	14,026,374,692	2,101,805,493	16,128,180,185
4	San Jose Terminus	S5, S23, S26, S27	343.04	213.15	23,545,137	37,893,145	7,600,759,925	476,163,940	8,076,923,865
5	San Jose, San Francisco and Oakland—via Transbay Tube	S2, S3, S5, S6, S7, S23, S26, S27	444.69	276.31	38,443,262	61,870,125	15,125,117,650	1,970,216,570	17,095,334,220
6	San Jose, Oakland and San Francisco—via Transbay Tube	S2, S3, S5, S9, S10, S23, S26, S27	427.54	265.66	38,430,599	61,848,295	14,425,405,764	2,005,212,335	16,430,618,099
PA	PACHECO PASS WITH ALTAMONT PASS (LOCAL SERVICE)								
1	San Francisco and San Jose Termini	S2, S5, S6, S8, S23, S25, S27, S29, S32, S38	545.83	339.16	33,804,956	54,404,291	16,434,327,793	2,017,431,430	18,451,759,223
2	Oakland and San Jose Termini	S3, S5, S9, S10, S23, S25, S27, S32, S38	512.50	318.45	31,366,052	50,479,202	14,497,886,699	1,577,215,168	16,075,101,867
3	San Francisco, Oakland and San Jose Termini (without Dumbarton Bridge)	S2, S3, S5, S6, S8, S9, S10, S23, S25, S27, S32, S38	580.81	360.90	35,331,039	56,859,575	18,060,550,025	2,460,070,743	20,520,620,768
4	San Jose Terminus	S5, S12, S23, S25, S27, S32, S38	460.34	286.04	29,494,732	47,467,504	12,586,300,388	991,304,370	13,577,604,758

CHAPTER 6
HIGH-SPEED TRAIN NETWORK AND ALIGNMENT ALTERNATIVES
COMPARISON: SAN JOSE TO GILROY

6 HIGH-SPEED TRAIN NETWORK AND ALIGNMENT ALTERNATIVES COMPARISON: SAN JOSE TO GILROY

The following summary text boxes for travel conditions, land use, aesthetics and visual resources, and cultural resources replace those contained in Chapter 7 of the 2008 Final Program EIR in Tables 7.2-12, 7.2-13, 7.2-14, 7.2-15, 7.2-16, 7.2-17, 7.2-18, 7.2-19, 7.2-20, and 7.2-21. These revisions reflect the revised information discussed in chapter 2 for the San Jose to Gilroy portion of the Pacheco Pass alignment alternative and for the revised information in Chapter 3 related to property impacts for San Francisco to San Jose (see page 3-3). These changes also revise the corresponding text boxes in Tables 7.3-2 and 7.3-5. The revised tables are included here as Tables 6-1 through 6-13. For readability, all prior changes shown in the Revised Draft Program EIR are incorporated as clean text. Changes to the text from the Revised Draft Program EIR are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with ~~strikeout~~.

Overall capital costs have also been revised as discussed in Chapter 5 for San Francisco to San Jose and for the San Jose to Gilroy portion of the Pacheco Pass alignment alternative. The capital costs documented in Tables 7.2-1, 7.2-3, 7.2-5, 7.2-8, 7.2-9, and 7.3-1 contained in Chapter 7 of the 2008 Final Program EIR did not result in any noticeable change as a result of the capital cost updates and are not included in this chapter. See Chapter 5 for the cost estimates.

Table 6-1
Revised Table 7.2-12: Pacheco Pass: San Francisco and San Jose Termini
(Base Case for Pacheco)

Cost (2006 dollars)	\$12.5 billion
Travel Conditions	<p>The Caltrain corridor Alignment would bring direct HST service up the San Francisco Peninsula to downtown San Francisco with potential stations in downtown San Francisco, at SFO (Millbrae), and a mid-Peninsula station at either Redwood City. The network alternative would serve Southern Santa Clara County with a Station in Gilroy, and the Central Valley, with station in Merced and Briggsmore. This network alternative would increase connectivity and accessibility to San Francisco, the Peninsula and SFO, the hub international airport for northern California, San Jose, Southern Santa Clara County and the Monterey/Santa Cruz/Salinas area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the San Francisco Peninsula while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. To the extent that grade separation of the HST system would also separate the UPRR line, local traffic conditions would improve in these areas and air emissions would be reduced. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. There would also be some grade separation benefits in the BNSF N/S (north of Merced) and UPRR N/S (south of Merced) in the Central Valley. This network alternative would not provide direct HST service to Oakland, Oakland Airport, the East Bay, south Alameda County, and the I-580 corridor.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S or BNSF N/S in the Chowchilla area and a medium compatibility along the BNSF N/S Alignment in the Central Valley.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the Caltrain Corridor between San Francisco and Gilroy and a low impact rating from Gilroy to the Central Valley. The BNSF N/S alignment has a medium impact rating except for low impact ratings in the Briggsmore and Chowchilla areas.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for a property impact rating between low and medium. Between San Francisco and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor), although property acquisition would be required for a 4-track at-grade alignment in the more narrow portions of this right-of-way. South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>
Aesthetics and Visual Resources: General impacts and rating.	<p>Segments visual ratings: (1) Caltrain – San Francisco to Dumbarton =low; (2) Caltrain – Dumbarton to San Jose =low; (3) Pacheco =medium; (4) Henry Miller to UPRR =low, and (5) BNSF N/S =low. Overall network alternative rating is low to medium.</p>

<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 168 known cultural resources.</p> <p>This network alternative extends through numerous historic districts in San Francisco. Historic properties and buildings dating from the 1900s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, a sanitary sewer system from 1912, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. The Santa Clara de Asis Mission in San Jose includes both prehistoric and historic resources. Overall, this network alternative was identified as having a moderate sensitivity for cultural resources.</p>
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Table 6-2
Revise Table 7.2-13—Pacheco Pass: Oakland and San Jose Termini

Cost (2006 dollars)	\$11.7 billion
Travel Conditions	<p>The Niles/I-880 corridor Alignment would bring direct HST service up the Oakland, the East Bay, and San Jose with stations in West Oakland, at the Oakland International Airport (Coliseum/BART), Union City (BART) and the Diridon Station in San Jose. The network alternative would serve southern Santa Clara County at Gilroy and the Central Valley with stations in Merced and Briggsmore. This network alternative would increase connectivity and accessibility to Oakland, the Oakland International Airport (Coliseum/BART), southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the East Bay while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. The fully grade-separated Niles/I-880 Alignment between Oakland and Union City would improve local traffic flow and reduce air pollution at existing rail crossings. There would also be some grade separation benefits in the BNSF N/S (north of Merced) and UPRR N/S (south of Merced) in the Central Valley. This network alternative would not provide direct HST service to San Francisco, SFO, the SF Peninsula/Caltrain Corridor, and the I-580 corridor (Tri-Valley and Tracy).</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S or BNSF N/S in the Chowchilla area and a medium compatibility along the BNSF N/S Alignment in the Central Valley.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the East Bay between Oakland and San Jose, and a medium impact rating for the Caltrain Corridor between San Jose and Gilroy. It has a low impact rating from Gilroy to the Central Valley. The BNSF N/S alignment has a medium impact rating except for low impact ratings in the Briggsmore and Chowchilla areas.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for low a property impact rating between low and medium. Between San Jose and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor). South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>
Aesthetics and Visual Resources: General impacts and rating.	<p>Segments visual ratings; (1) Oakland to Niles Junction =low; (2) Niles Junction to San Jose =medium; (3) Pacheco =medium; (4) Henry Miller to UPRR =low; and (5) BNSF N/S =low. Overall network alternative rating is low to medium.</p>

<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are <u>107</u> known cultural resources. Historic properties and buildings dating from the 1900s and industrial complexes from the 1920s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, a sanitary sewer system, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. Overall, this network alternative was identified as having a low sensitivity for cultural resources.</p>
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Table 6-3
Revised Table 7.2-14—Pacheco Pass: San Francisco, Oakland, and San Jose Termini

Cost (2006 dollars)	\$16.1 billion
Travel Conditions	<p>The Caltrain corridor Alignment would bring direct HST service up the San Francisco Peninsula to downtown San Francisco with potential stations in downtown San Francisco, at SFO (Millbrae), and a mid-Peninsula station at Palo Alto. It would directly serve Oakland and the East Bay with stations at West Oakland/7th Street, the Oakland International Airport (Coliseum/BART), Union City (BART), San Jose (Diridon) and would serve southern Santa Clara County with a station at Gilroy (Caltrain). Service to the Central Valley would be at Merced (Downtown), and the Briggsmore (Amtrak) station. This network alternative would increase connectivity and accessibility to San Francisco, the Peninsula and SFO, the hub international airport for northern California, Oakland, the Oakland International Airport (Coliseum/BART), southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the San Francisco Peninsula while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion, potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less-than-significant traffic impacts in the remaining northbound lanes and all southbound lanes. The fully grade-separated, Niles/I-880 Alignment between Oakland and Union City would improve local traffic flow and reduce air pollution at existing rail crossings. There would also be some grade separation improvements in the BNSF N/S (north of Merced) and UPRR N/S (south of Merced) in the Central Valley. This network alternative would not provide direct HST service to the I-580 corridor (Tri-Valley and Tracy).</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S or BNSF N/S in the Chowchilla area and a medium compatibility along the BNSF N/S Alignment in the Central Valley.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the Caltrain Corridor between San Francisco and Gilroy, a medium impact rating for the east bay between Oakland and San Jose, and a low impact rating from Gilroy to the Central Valley. The BNSF N/S alignment has a medium impact rating except for low impact ratings in the Briggsmore and Chowchilla areas.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for low a property impact rating between low and medium. Between San Francisco and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor), although property acquisition would be required for a 4-track at-grade alignment in the more narrow portions of this right-of-way. South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>

<p>Aesthetics and Visual Resources: General impacts and rating.</p>	<p>Segments visual ratings: (1) Caltrain – San Francisco to Dumbarton =low; (2) Caltrain – Dumbarton to San Jose =low; (3) Oakland to Niles Junction =low; (4) Niles Junction to San Jose =medium; (5) Pacheco =medium; (6) Henry Miller to UPRR =low; and (7) BNSF N/S =low. Overall network alternative rating is low to medium.</p>
<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 196 known cultural resources. Of the Pacheco Pass network alternatives, this network alternative was identified to have the highest number of known resources. This network alternative extends through numerous historic districts in San Francisco. Historic properties and buildings dating from the 1900s and industrial complexes from the 1920s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, a sanitary sewer system, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. The Santa Clara de Asis Mission in San Jose includes both prehistoric and historic resources. Overall, this network alternative was identified as having a high sensitivity for cultural resources.</p>

Table 6-4
Revised Table 7.2-15—Pacheco Pass: San Jose Terminus

Cost (2006 dollars)	\$8.1 billion
Travel Conditions	<p>This network alternative would increase connectivity and accessibility San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. To the extent that grade separation of the HST system would also separate the UPRR line, local traffic conditions would improve in these areas and air emissions would be reduced. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. There would also be some grade separation benefits in the BNSF N/S (north of Merced) and UPRR N/S (south of Merced) in the Central Valley. This network alternative would not provide direct HST service to San Francisco, SFO, the SF Peninsula/Caltrain Corridor between San Francisco and San Jose, Oakland, Oakland Airport, the East Bay, south Alameda County, and the I-580 corridor resulting in considerably less Travel Conditions benefits (travel times, reliability, safety, connectivity, sustainable capacity, and passenger cost) than other network alternatives that directly serve additional stations/markets in the Bay Area.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S or BNSF N/S in the Chowchilla area and a medium compatibility along the BNSF N/S Alignment in the Central Valley.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the Caltrain Corridor between San Jose and Gilroy, and a low impact rating from Gilroy to the Central Valley. The BNSF N/S alignment has a medium impact rating except for low impact ratings in the Briggsmore and Chowchilla areas.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for a property impact rating between low and medium. Between San Jose and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor). South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>
Aesthetics and Visual Resources: General impacts and rating	<p>Segments visual ratings: (1) Pacheco =medium; (2) Henry Miller to UPRR =low; and (3) BNSF N/S =low. Overall network alternative rating is low to medium.</p>

<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 79 known cultural resources.</p> <p>Of the Pacheco Pass network alternatives, this network alternative was identified to have the least number of known resources.</p> <p>Historic resources in small towns of Santa Clara Valley. Historic properties and buildings dating from the 1920s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, a sanitary sewer system, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1890s.</p> <p>Overall, this network alternative was identified as having a low sensitivity for cultural resources.</p>
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Table 6-5
Revised Table 7.2-16—Pacheco Pass: San Jose, San Francisco, and
Oakland—via Transbay Tube

Cost (2006 dollars)	\$17.1 billion
Travel Conditions	<p>The Caltrain corridor Alignment would bring direct HST service up the San Francisco Peninsula to downtown San Francisco. The transbay tube would provide direct service to Oakland, with a station in West Oakland. The Caltrain Corridor would serve the San Francisco International Airport with a station at (Millbrae), and a mid-Peninsula station at Palo Alto. HST service to San Jose would be at the Diridon Station. The Gilroy Station would service Southern Santa Clara County, and the Central Valley would be served by stations in Merced and Briggsmore. This network alternative would increase connectivity and accessibility to Oakland, San Francisco, the Peninsula and SFO, the hub international airport for northern California, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/Salinas area, and the Central Valley. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the San Francisco Peninsula while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. To the extent that grade separation of the HST system would also separate the UPRR line, local traffic conditions would improve in these areas and air emissions would be reduced. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. There would also be some grade separation benefits in the BNSF N/S (north of Merced) and UPRR N/S (south of Merced) segments in the Central Valley. This network alternative would not provide direct HST service to Oakland Airport, south Alameda County, and the I-580 corridor.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S or BNSF N/S in the Chowchilla area and a medium compatibility along the BNSF N/S Alignment in the Central Valley.</p> <p>Environmental Justice: This network alternative has medium environmental impact justice rating for the Caltrain Corridor between San Francisco and Gilroy and a low impact rating from Gilroy to the Central Valley. The BNSF N/S alignment has a medium impact rating except for low impact ratings in the Briggsmore and Chowchilla areas.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for a property impact rating between low and medium. Between San Francisco and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor), although property acquisition would be required for a 4-track at-grade alignment in the more narrow portions of this right-of-way. South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>
Aesthetics and Visual Resources: General impacts and rating.	<p>Segments visual ratings: (1) Caltrain – San Francisco to Dumbarton =low; (2) Caltrain – Dumbarton to San Jose =low; (3) Pacheco =medium; (4) Henry Miller to UPRR =low; (5) Trans Bay Crossing =none; and (6) BNSF N/S =low. Overall network alternative rating is low to medium.</p>
Cultural	There are 109 known cultural resources.

<p>Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>This network alternative extends through numerous historic districts in San Francisco. Historic properties and buildings dating from the 1900s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, a sanitary sewer system, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. The area around the Trans Bay crossing likely includes historic artifacts from the Gold Rush period through the 1906 earthquake. The Santa Clara de Asis Mission in San Jose includes both prehistoric and historic resources. Overall, this network alternative was identified as having a moderate sensitivity for cultural resources.</p>
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Table 6-6
Revised Table 7.2-17—Pacheco Pass: San Jose, Oakland, and San Francisco—via Transbay Tube

Cost (2006 dollars)	\$16.4 billion
Travel Conditions	<p>The Niles/I-880 Alignment would bring direct HST service up the East Bay and the transbay tube would provide direct service to downtown San Francisco. It would directly serve Oakland and the East Bay with stations at West Oakland/7th Street, Coliseum/Airport, Union City (BART), San Jose (Diridon) and would serve southern Santa Clara County with a station at Gilroy (Caltrain). Service to the Central Valley would be at Merced (Downtown), and Briggsmore (Amtrak) stations. This network alternative would increase connectivity and accessibility to San Francisco, Oakland, the Oakland International Airport (Coliseum/BART), southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the East Bay while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. The fully grade-separated Niles/I-880 Alignment between Oakland and Union City would improve local traffic flow and reduce air pollution at existing rail crossings. There would also be some grade separation benefits in the BNSF N/S (north of Merced) and UPRR N/S (south of Merced) segments in the Central Valley. This network alternative would not provide direct service to SFO, the mid-SF Peninsula, and the I-580 corridor (the Tri-Valley, and Tracy).</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S or BNSF N/S in the Chowchilla area and a medium compatibility along the BNSF N/S Alignment in the Central Valley.</p> <p>Environmental Justice: This network alternative has medium environmental impact justice rating for the East Bay between Oakland and San Jose and for the Caltrain Corridor between San Jose and Gilroy, and a low impact rating from Gilroy to the Central Valley. The BNSF N/S alignment has a medium impact rating except for low impact ratings in the Briggsmore and Chowchilla areas.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for a property impact rating between low and medium. Between San Jose and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor). South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>
Aesthetics and Visual Resources: General impacts and rating	<p>Segments visual ratings: (1) Oakland to Niles Junction =low; (2) Niles Junction to San Jose =medium; (3) Pacheco =medium; (4) Henry Miller to UPRR =low; (5) Trans Bay Crossing =none; and (6) BNSF N/S =low. Overall network alternative rating is low to medium.</p>

<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 112 known cultural resources. Historic properties and industrial complexes dating from the 1920s and 1940s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, a sanitary sewer system, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. The area around the Trans Bay crossing likely includes historic artifacts from the Gold Rush period through the 1906 earthquake. Overall, this network alternative was identified as having a low sensitivity for cultural resources.</p>
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Table 6-7
Revised Table 7.2-18—Pacheco Pass with Altamont Pass (Local Service): San Francisco and San Jose Termini

Cost (2006 dollars)	\$18.5 billion
Travel Conditions	<p>The Caltrain corridor Alignment would bring direct HST service up the San Francisco Peninsula to downtown San Francisco with potential stations in downtown San Francisco, at SFO (Millbrae), a mid-Peninsula station at Palo Alto, and a San Jose Station (Diridon). HST service would be provided to Southern Santa Clara County at a Gilroy Station, with service to the Central Valley at Merced and Modesto. The Altamont Pass would use the UPRR Alignment with stations in Union City (Shinn), Pleasanton (I-680/Bernal), and downtown Tracy. This network alternative would increase connectivity and accessibility to San Francisco, the Peninsula and SFO, the hub international airport for northern California, southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, the I-580 Corridor and Tri-Valley area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the San Francisco Peninsula while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. To the extent that grade separation of the HST system would also separate the UPRR line, local traffic conditions would improve in these areas and air emissions would be reduced. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. There would also be some grade separation benefits in the UPRR in the I-580 corridor and UPRR N/S Alignment segments through the Central Valley. This network alternative would not provide direct HST service to Oakland, and Oakland Airport.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S in the Chowchilla area. It exhibits low compatibility where it does not follow a transportation right-of-way in the Altamont Pass area. It exhibits a medium to high compatibility where it crosses the San Francisco Bay, in Fremont along the more narrow Centerville line, in the Shinn area. It has a medium compatibility in the Lathrop, Manteca, Modesto and Merced areas.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the Caltrain Corridor between San Francisco and Gilroy and low environmental justice impact rating for the UPRR alignment from Niles Canyon to the Central Valley. It has a low impact rating between Gilroy and the Central Valley, and a medium impact rating in the Central Valley except in the Manteca area, where the rating is low.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for high property impacts in the Niles Canyon and Manteca areas, where additional right-of-way would be required. Between San Francisco and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor), although property acquisition would be required for a 4-track at-grade alignment in the more narrow portions of this right-of-way. South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>

<p>Aesthetics and Visual Resources: General impacts and rating.</p>	<p>Segments visual ratings: (1) Caltrain – San Francisco to Dumbarton =low; (2) Caltrain – Dumbarton to San Jose =low; (3) Pacheco =medium; (4) Henry Miller to UPRR =low; (5) UPRR =medium; (6) Tracy Downtown =low; (7) Dumbarton High Bridge =medium; and (8) UPRR N/S =low. Overall network alternative rating is low to medium.</p>
<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 199 known cultural resources. This network alternative extends through numerous historic districts in San Francisco. Historic properties and buildings dating from the 1900s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. The area around San Jose has a high density of cultural resources. Archaeological resources in the area of the Dumbarton crossing include prehistoric sites associated with burials, and historic sites from early 1900s industrial activities. Overall, this network alternative was identified as having a high sensitivity for cultural resources.</p>

Table 6-8
Revised Table 7.2-19—Pacheco Pass with Altamont (Local Service): Oakland and San Jose Termini

Cost (2006 dollars)	\$16.1 billion
Travel Conditions	<p>This network alternative would provide direct service to Oakland with a station in West Oakland, to the Oakland International Airport with a Coliseum/BART station, to Southern Alameda County with a station at Union City (BART), to San Jose at the Diridon Station, to Southern Santa Clara County with a Gilroy Station, and to the Central Valley with stations at Merced and Modesto. The Altamont Pass would use the UPRR Alignment with local HST stations at Pleasanton (I-680/Bernal), and downtown Tracy. This network alternative would increase connectivity and accessibility to Oakland, the Oakland International Airport (Coliseum/BART), southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, the I-580 Corridor and Tri-Valley area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode of travel while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. The fully grade-separated Niles/I-880 Alignment between Oakland and Union City would improve local traffic flow and reduce air pollution at existing rail crossings. There would also be some grade separation benefits in the UPRR in the I-580 corridor and UPRR N/S Alignment segments through the Central Valley. This network alternative would not provide direct HST service to San Francisco, SFO and the SF Peninsula/Caltrain Corridor between San Francisco and San Jose.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S in the Chowchilla area. It exhibits low compatibility where it does not follow a transportation right-of-way in the Altamont Pass area. It has a medium compatibility in the Lathrop, Manteca, Modesto and Merced areas.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the East Bay Between Oakland and San Jose, for the Caltrain Corridor between San Jose and Gilroy, and a low impact rating between Gilroy and the Central Valley. It exhibits a low environmental justice impact rating for the UPRR alignment from Niles Canyon to the Central Valley, and a medium impact rating in the Central Valley, except in the Manteca area, where the rating is low.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for high property impacts in the Niles Canyon and Manteca areas, where additional right-of-way would be required. Between San Jose and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor). South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>

<p>Aesthetics and Visual Resources: General impacts and rating.</p>	<p>Segments visual ratings: (1) Oakland to Niles Junction =low; (2) Niles Junction to San Jose =medium; (3) Pacheco =medium; (4) Henry Miller to UPRR =low; (5) UPRR =medium; (6) Tracy Downtown =low; and (7) UPRR N/S =low. Overall network alternative rating is low to medium.</p>
<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 134 known cultural resources. Historic properties and industrial complexes dating from the 1920s and 1940s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. Overall, this network alternative was identified as having a moderate sensitivity for cultural resources.</p>

Table 6-9
Revised Table 7.2-20—Pacheco Pass with Altamont Pass (Local Service): SF, Oak, and SJ
Termini (without Dumbarton Bridge)

Cost (2006 dollars)	\$20.5 billion
Travel Conditions	<p>The Caltrain corridor Alignment would bring direct HST service up the San Francisco Peninsula to downtown San Francisco with potential stations in downtown San Francisco, at SFO (Millbrae), a mid-Peninsula station at Palo Alto, and a San Jose Station (Diridon). HST service would be provided to Southern Santa Clara County at a Gilroy Station, with service to the Central Valley at Merced and Modesto. The network alternative would provide direct service to Oakland with a station in West Oakland, to the Oakland International Airport with a Coliseum/BART station, and to a Union City (BART) Station. The Altamont Pass would use the UPRR Alignment with local HST stations at Pleasanton (I-680/Bernal), and downtown Tracy. This network alternative would increase connectivity and accessibility to San Francisco, the Peninsula and SFO, the hub international airport for northern California, Oakland, the Oakland International Airport (Coliseum/BART), southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, the I-580 Corridor and Tri-Valley area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey-Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode along the East Bay while improving the safety, reliability, and performance of the regional commuter service, particularly along the Altamont Pass Alignment. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. The fully grade-separated Niles/I-880 Alignment between Oakland and Union City would improve local traffic flow and reduce air pollution at existing rail crossings. There would also be some grade separation benefits in the UPRR in the I-580 corridor and UPRR N/S Alignment segments through the Central Valley.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S in the Chowchilla area. It exhibits low compatibility where it does not follow a transportation right-of-way in the Altamont Pass area. It has a medium compatibility in the Lathrop, Manteca, Modesto and Merced areas.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the East Bay Between Oakland and San Jose and for the Caltrain Corridor between San Francisco and Gilroy. It has a low impact rating between Gilroy and the Central Valley. It exhibits a low environmental justice impact rating for the UPRR alignment from Niles Canyon to the Central Valley, and a medium impact rating in the Central Valley, except in the Manteca area, where the rating is low.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for high property impacts in the Niles Canyon and Manteca areas, where additional right-of-way would be required. Between San Francisco and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor), although property acquisition would be required for a 4-track at-grade alignment in the more narrow portions of this right-of-way. South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel</p>

	through rural land.
Aesthetics and Visual Resources: General impacts and rating.	Segments visual ratings: (1) Caltrain – San Francisco to Dumbarton =low; (2) Caltrain – Dumbarton to San Jose =low; (3) Oakland to Niles Junction =low; (4) Niles Junction to San Jose =medium; (5) Pacheco =medium; (6) Henry Miller to UPRR =low; (7) UPRR =medium; (8) Tracy Downtown =low; and (9) UPRR N/S =low. Overall network alternative rating is low to medium.
Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect	There are 223 known cultural resources. Of the Pacheco Pass with Altamont (local service) network alternatives, this network alternative was identified to have the highest number of known resources. This network alternative extends through numerous historic districts in San Francisco. Historic properties and buildings dating from the 1900s are within the area of potential effects along with industrial complexes dating from the 1920s an 1940s, heritage trees, water delivery systems and canals dating from the 1890s, railroad facilities, freeway bridges dating from the 1940s, and residential properties dating from the 1880s. Overall, this network alternative was identified as having a high sensitivity for cultural resources.

Table 6-10
Revised Table 7.2-21—Pacheco Pass with Altamont Pass (Local Service): San Jose Terminus

Cost (2006 dollars)	\$13.6 billion
Travel Conditions	<p>This network alternative would provide direct HST service to San Jose (Diridon), Southern Santa Clara county with a station in Gilroy, and the Central Valley with Stations in Merced and Modesto. This network alternative would increase connectivity and accessibility to southern Alameda County, San Jose, Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area, the I-580 Corridor and Tri-Valley area, and the Central Valley. The Gilroy station would be the closest HST station for Monterey, Santa Cruz, and San Benito counties <u>and a portion of Santa Cruz County</u>. The HST Network Alternative would provide a safer, more reliable, energy-efficient intercity mode in Santa Clara County and the Central Valley while improving the safety, reliability, and performance of the regional commuter service. The HST Network Alternative would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic. To the extent that grade separation of the HST system would also separate the UPRR line, local traffic conditions would improve in these areas and air emissions would be reduced. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. There would also be grade separation benefits in the UPRR in the I-580 corridor and UPRR N/S Alignment through the Central Valley. This network alternative would not provide direct HST service to San Francisco, SFO, the SF Peninsula/Caltrain Corridor between San Francisco and San Jose, Oakland, and Oakland Airport.</p>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: Majority of network alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way for most of the alignment. It exhibits low compatibility where it connects to the UPRR N/S in the Chowchilla area. It exhibits low compatibility where it does not follow a transportation right-of-way in the Altamont Pass area. It has a medium compatibility in the Lathrop, Manteca, Modesto and Merced areas.</p> <p>Environmental Justice: This network alternative has medium environmental justice impact rating for the East Bay Between Niles Junction and San Jose and for the Caltrain Corridor between San Francisco and Gilroy. It has a low impact rating between Gilroy and the Central Valley. It exhibits a low environmental justice impact rating for the UPRR alignment from Niles Canyon to the Central Valley, and a medium impact rating in the Central Valley, except in the Manteca area, where the rating is low.</p> <p>Community: This network alternative would not affect community cohesion, given that the majority of the alignment is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This network alternative has the potential for high property impacts in the Niles Canyon and Manteca areas, where additional right-of-way would be required. Between San Jose and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor). South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land.</p>
Aesthetics and Visual Resources: General impacts and rating.	<p>Segments visual ratings: (1) Niles Junction to San Jose =medium; (2) Pacheco =medium; (3) Henry Miller to UPRR =low; (4) UPRR =medium; (5) Tracy Downtown =low; and (6) UPRR N/S =low. Overall network alternative rating is low to medium.</p>

<p>Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect</p>	<p>There are 110 known cultural resources.</p> <p>Of the Pacheco Pass with Altamont (local service) network alternatives, this network alternative was identified to have the least number of known resources.</p> <p>Historic properties and buildings dating from the 1920s are within the area of potential effects along with heritage trees, water delivery systems and canals dating from the 1890s, freeway bridges dating from the 1940s, and residential properties dating from the 1890s. Overall, this network alternative was identified as having a low sensitivity for cultural resources.</p>
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Table 6-11
Revised Table 7.3-2—Caltrain: Dumbarton to San Jose

<p>Cost (2006 dollars)</p>	<p>\$1.62 billion</p>
<p>Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice</p>	<p>Compatibility: The majority of this alignment alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Environmental Justice: This alignment alternative has medium environmental justice impact rating for the Caltrain Corridor south of Dumbarton to San Jose.</p> <p>Community: This alignment alternative would not affect community cohesion, given that it is within or immediately adjacent to an existing major rail or highway rights-of-way.</p> <p>Property: This alignment alternative has the potential for a property impact rating between low and medium.</p>

Table 6-12
Revised Table 7.3-5—Pacheco Pass Alternatives: San Jose Diridon Station to San Luis Reservoir

Cost (2006 dollars)	\$3.86 billion
Travel Conditions	The Pacheco alignments would bring direct HST service up the Caltrain alignment with a potential station at Gilroy (Caltrain) or Morgan Hill (Caltrain). This alignment alternative would increase connectivity and accessibility to Southern Santa Clara County and Monterey/ Santa Cruz/ Salinas area. The HST system would provide a safer, more reliable, energy-efficient intercity mode directly to Santa Clara County while improving the safety, reliability and performance of the existing Caltrain commuter rail service through potential grade separation improvements between Gilroy and San Jose. This alignment alternative would greatly increase the capacity for intercity travel in Santa Clara County and reduce highway congestion in most areas. The HST Network Alternative would reduce the number of travel lanes from six to four on Monterey Highway between Umbarger Road and Metcalf Road (near Bailey Road) in the City of San Jose. This would slightly increase traffic congestion potentially resulting in significant traffic impacts in the northbound direction between Senter and Blossom Hill with potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes. The Gilroy station would be the closest HST station for Monterey, Santa Cruz , and San Benito counties <u>and a portion of Santa Cruz County.</u>
Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice	<p>Compatibility: The majority of this alignment alternative is compatible (high rating), given that it is within or immediately adjacent to an existing major rail or highway rights-of-way. It exhibits low compatibility where it does not follow a transportation right-of-way east of Gilroy.</p> <p>Environmental Justice: This alignment alternative has medium environmental justice impact rating.</p> <p>Community: This alignment alternative would not affect community cohesion, given that it is within or immediately adjacent to an existing major rail or highway rights-of-way in the urban areas.</p> <p>Property: This alignment alternative has the potential for low to medium property impacts. South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR.</p>
Aesthetics and Visual Resources: General impacts and rating.	Includes elevated facilities at the Diridon San Jose station, elevated facilities south of Diridon station, highway grade separations, addition of HST corridor adjacent to Monterey Highway, new transportation corridor between Gilroy and Pacheco Valley, elevated crossing of SR 152 in Pacheco Valley, and cut and fill sections over Pacheco Pass. Overall medium visual impact.
Cultural Resources and Paleontological Resources: Potential presence of historical resources in area of potential effect	<p>There are 12 known cultural resources.</p> <p>Little development has taken place along this alignment. Resources include heritage trees, buildings, canals, and a bridge as well as potentially historic resources in the Santa Clara Valley, including Morgan Hill and Gilroy.</p>

CHAPTER 7
REVISED FINAL PROGRAM EIR MATERIAL AND DESIGNATION OF
A PREFERRED NETWORK ALTERNATIVE FOR CONNECTING THE
BAY AREA TO THE CENTRAL VALLEY

7 REVISED FINAL PROGRAM EIR AND DESIGNATION OF A PREFERRED NETWORK ALTERNATIVE FOR CONNECTING THE BAY AREA TO THE CENTRAL VALLEY

This chapter summarizes the designation of the Bay Area to Central Valley HST preferred alternative in the prior 2008 Final Program EIR; synthesizes the information contained in Chapters 2—5 of Volume 1 of the Revised Final Program EIR and discusses the effect of the information on the selection of the preferred alternative; and revises the rationale supporting the preferred alternative for connecting the HST between the Bay Area and the Central Valley.

7.1 Recommendation of Preferred Alternative in 2008 Final Program EIR

Chapter 8 of 2008 Final Program EIR concluded that the Pacheco Pass Network Alternative serving San Francisco via San Jose was the preferred alternative¹. Preferred alignments and station locations included:

<u>Corridor</u>	<u>Alignment</u>	<u>Stations</u>
San Francisco to San Jose Corridor:	Caltrain Corridor (shared use)	San Francisco/Transbay Transit Center Millbrae Potential Palo Alto or Redwood City
San Jose to Central Valley Corridor:	Pacheco Pass via Henry Miller Rd	San Jose/Diridon Station Gilroy Station (Caltrain)
Central Valley Corridor:	UPRR N/S, but continue to study BNSF	Downtown Modesto Downtown Merced

The 2008 Final Program EIR identified a preferred location for a maintenance facility in Merced (Castle Air Force Base) and explained that the preferred alternative would involve no San Francisco Bay crossing.

The 2008 Final Program EIR described the evaluation criteria for determining a preferred network alternative; the public and agency support for the different Pacheco and Altamont network alternatives, as well as the Pacheco with Altamont (local service) network alternatives; a summary of the Pacheco, Altamont, and Pacheco with Altamont (local service) alternatives; a comparison of the network alternatives for public support, ridership and revenue, capital and operating costs, travel times and conditions, constructability and logical constraints, and environmental impacts. The reasons identified in May 2008 for selecting the Pacheco Pass alternative serving San Francisco via San Jose as preferred included the following:

- The Pacheco Pass minimizes impacts on wetlands, waterbodies, and the environment.
- The Pacheco Pass best serves the connection between Northern and Southern California.
- The Pacheco Pass best utilizes the Caltrain Corridor.
- The Pacheco Pass is strongly supported by the Bay Area region, cities, agencies, and organizations.

¹ See Authority Resolution No. 08-01 (subsequently rescinded in December 2009 by Res. HSRA 10-012).

The new information contained in this document results in additional information to be considered in selecting the preferred alternative. As explained below, although the additional information results in some changes to the rationale for selecting the Pacheco Pass Network Alternative serving San Francisco via San Jose, it remains the recommended preferred alternative.

7.2 New and Clarified Information in the Revised Final Program EIR Does Not Alter the Recommendation of the Pacheco Pass Network Alternative Serving San Francisco Via San Jose as the Preferred Alternative

7.2.1 Revised Project Description and Analyses: San Jose to Gilroy

The new information in Chapter 2 of [Volume 1 of the Revised Final Program EIR](#) results in a clarification of the location of the HST alignment alternative between San Jose and Gilroy as being adjacent to UPRR's mainline right-of-way, rather than in UPRR's right-of-way. In addition, there are some additional impacts associated with that portion of the Pacheco Pass Network Alternative between San Francisco and Gilroy than previously identified:

- the potential for the same type of significant land use compatibility and property impacts as previously disclosed, but of a slightly higher magnitude;
- the potential for a slight increase in traffic congestion as a result of narrowing the Monterey Highway to accommodate construction of the HST tracks resulting in the potential for significant traffic impacts in the northbound direction between Senter and Blossom Hill and potentially less than significant traffic impacts in the remaining northbound lanes and all southbound lanes;
- the potential for elimination of black walnut trees that may qualify as an historical resource under CEQA as a result of construction of the HST tracks adjacent to UPRR's right-of-way, between the UPRR right-of-way and the modified Monterey Highway;
- the potential for some adjustments to the profile of the HST track to avoid impacts to UPRR freight operations, which may result in secondary environmental impacts that would require analysis and potentially mitigation at the project level.

These additional impacts in the San Jose to Gilroy portion of the Pacheco Pass Network Alternative serving San Francisco via San Jose are of a relatively minor magnitude, and they do not detract from recommendation of this network alternative as preferred. A multitude of factors influenced the designation of the preferred alternative in the 2008 Final Program EIR. From an environmental perspective, a critical issue was that the Pacheco Pass Network Alternative serving San Francisco via San Jose minimized impacts on wetlands, waterbodies, and the environment. This conclusion has not changed based on the new information [for the area between San Jose and Gilroy](#). None of the additional environmental impacts identified in this document, individually or collectively, changes the prior conclusion that the Pacheco Pass Network Alternative Serving San Francisco via San Jose results in the fewest environmental impacts overall of the network alternatives while providing direct HST service to downtown San Francisco, San Francisco Airport (SFO), and San Jose.

7.2.2 Effect of Union Pacific Railroad Denying Use of Its Rights-of-Way on Selection of Preferred Network Alternative

Chapter 3 of [Volume 1 of the Revised Final Program EIR](#) analyzes how UPRR's position denying use of its rights-of-way for placement of HST track affects the land use compatibility and property impacts of each alignment alternative. UPRR's position denying use of its rights-of-way for HST tracks does result in some changes to the analysis of land use compatibility and property impacts for different alignment alternatives. The new analysis does not, however, result in a change to the designation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as the preferred alternative.

Chapter 3 discloses a potential for a higher level of land use incompatibility and higher property impacts than previously discussed for some, but not all, alignment alternatives in the various HST corridors. The text explains that in some instances involving UPRR rights-of-way with relatively larger widths, the 2008 Final Program EIR land use analysis assumed that HST tracks could potentially be located within UPRR rights-of-way to result in reduced environmental impacts. Other alignment alternatives were described as being located adjacent to UPRR rights-of-way. Still other alignment alternatives are not proximate to UPRR rights-of-way. UPRR's denial of the use of its rights-of-way affect only those alignment alternatives assumed to utilize UPRR right-of-way in whole or in part.

Information in Chapter 3 also suggests that property impacts in the corridor between San Francisco and San Jose would be higher than previously disclosed in the 2008 Final Program EIR. The rail right of way in this corridor is owned by the Peninsula Corridor Joint Powers Board, with UPRR retaining rights for freight and intercity passenger service. Some limited additional property acquisition along the right-of-way in narrow areas would be necessary. While the alignment remains predominantly within a publicly owned right-of-way, more private property acquisition would be necessary than previously understood. Land use compatibility would remain high, however, because most of the alignment would be located within the existing right of way.

On balance, the analysis in this document suggests that while UPRR's position denying use of its rights-of-way for HST track would result in an increased need for property acquisition beyond that originally anticipated in some areas, the increased need would be orders of magnitude less for the Pacheco Pass Network Alternative Serving San Francisco via San Jose than for Altamont Pass Network Alternatives with similar service to two major cities. This is the case because the alignment alternatives involved in the Pacheco Pass Network Alternative serving San Francisco via San Jose have comparatively fewer areas that were identified as involving a potential use of UPRR rights-of-way than for the Altamont Network Alternatives. UPRR's position denying use of its rights-of-way for HST tracks presents a greater implementation challenge for the Altamont Pass network alternatives than for the Pacheco Pass Network Alternative serving San Francisco via San Jose.

7.2.3 Pacheco Pass Network Alternative Serving San Francisco via San Jose

San Francisco to San Jose Corridor: The Caltrain alignment alternative between San Francisco and San Jose would be located predominantly within the rail right-of-way owned by the PCJBP. UPRR has a retained easement to operate freight trains on this rail right-of-way subject to certain restrictions. UPRR also has reserved a perpetual and exclusive right to conduct intercity passenger service. The PCJBP is a willing partner with the Authority in planning for HST in its rail right-of-way between San Francisco and San Jose to complement Caltrain operations. It is anticipated that UPRR freight operations can be accommodated in this corridor with Caltrain and HST service. It may be necessary to acquire additional strips of property along the existing right-of-way, with the extent and location of property acquisition dependent on the design details for the corridor. Still, the magnitude of property acquisition that may be involved in this corridor is comparatively less than in corridors that necessitate having HST tracks entirely outside existing transportation right-of-way.

San Jose to Central Valley Corridor: For the San Jose to Central Valley Corridor, the clarified location of HST tracks between San Jose and Gilroy is that they would be adjacent to UPRR mainline right-of-way. UPRR's denial of the use of its rights-of-way therefore has only a small effect in this corridor because the alignment was assumed to be adjacent, not in, UPRR mainline right-of-way. Between San Jose and Gilroy, this alignment takes advantage of the underutilized Monterey Highway transportation corridor by using a portion of this street right-of-way to place HST tracks, thereby greatly reducing the need to acquire private residences or business for locating the tracks. The two narrow areas south of Coyote and at the downtown Gilroy Caltrain station that involve UPRR rights-of-way or property may result in the need for slightly more property than originally anticipated, and could result in greater property impacts, but these areas are relatively limited (0.5 linear miles). As the HST alignment veers east from Gilroy, it

would depart the UPRR right-of-way entirely and would have no interface with UPRR until it intersected with the north/south alignment south of Merced in the Central Valley corridor

Central Valley Corridor: Between south of Chowchilla and Merced, there are two areas along the UPRR N/S alignment alternative that the prior EIR assumed would have UPRR rights-of-way available for locating HST tracks, and a lengthy portion of the UPRR N/S where the prior EIR assumed the tracks would be adjacent to UPRR rights-of-way. Without such UPRR rights-of-way available it would be necessary to acquire residential, commercial, and agricultural property adjacent to UPRR right-of-way (about 25.9 miles). An alternative exists to use the BNSF N/S alignment, which would avoid the interface with UPRR altogether. Because of the presence of an alternative in the Central Valley Corridor, and considering the relatively limited stretches through residential areas of the UPRR N/S alignment alternative that would require more property acquisition than previously understood for connecting to the Pacheco Pass alignment alternatives, UPRR's position denying use of its rights-of-way does not render Pacheco Pass network alternatives infeasible, but would make the BNSF N/S alignment potentially more feasible to implement.

Other HST Alternatives

In contrast to the San Francisco to San Jose and the San Jose to Central Valley corridors, the Oakland to San Jose Corridor (about 20 miles between Oakland and Fremont), the East Bay to Central Valley Corridor (about 11.6 to 17.8 miles between Pleasanton and Lathrop depending on the route through or around Tracy), would have considerably more land use incompatibility and property impacts from UPRR's denying use of its rights-of-way. The increase in land use incompatibility and property impacts in these areas is due to the need to acquire large swaths of property on one or the other side of the UPRR rights-of-way to allow for placement of HST tracks adjacent to, but not within, UPRR rights-of-way. These areas include residential and commercial/industrial development of varying density. Acquisition of an entirely new right-of-way in these areas would be a far greater level of impact than previously anticipated.

Oakland to San Jose Corridor: Between Oakland and Fremont, the proposed Niles/I-880 alignment alternative is the sole alternative for this stretch of HST track and would have to be moved laterally to avoid UPRR rights-of-way. The properties adjacent to the UPRR right-of-way are densely developed generally up to or near the edge of the right-of-way. The difficulty and expense of acquiring the necessary property to build the HST tracks adjacent to UPRR right-of-way between Fremont and Oakland would render this portion of the alignment alternative less practicable for cost and time delay reasons. Network alternatives that reach Oakland via the Niles/I-880 alignment alternative would result in considerably more property impacts and make the corridor less practicable. This would include primarily the Altamont Pass Network Alternatives serving Oakland (Tables 7.2-2, 7.2-3, 7.2-6, 7.2-9, 7.2-10, 7.2-11 in the 2008 Final Program EIR), but would also include the three representative Pacheco Pass network alternatives (Tables 7.2-13, 7.2-15, 7.2-17 in 2008 Final Program EIR) that would reach Oakland along the east side of San Francisco Bay.

East Bay to Central Valley Corridor: Between Pleasanton and Livermore, the UPRR alignment alternative would have to be moved to avoid UPRR rights-of-way, into adjacent densely developed residential and commercial/industrial properties. The difficulty and expense of acquiring the necessary property to build the HST tracks adjacent to UPRR right-of-way between Pleasanton and Livermore would increase impacts and make the corridor less practicable. The I-680/ 580/UPRR alignment alternative would avoid the increased impacts associated with the UPRR alignment alternative by minimizing the interface with UPRR right-of-way. The I-680/580/UPRR alignment alternative does, however, present increased constructability issues (elevated in the median of I-580 above active BART line) and operational issues (restricted speed in vicinity of I-580/680 interchange).

Between Livermore and Tracy, the I-680/580/UPRR, Patterson Pass/UPRR, and S UPRR alignment alternatives would avoid the interface with UPRR presented by the UPRR alignment alternative based on

HST track placement assumed as being adjacent to UPRR initially. The difficulty and expense of acquiring property adjacent to the UPRR alignment would increase impacts and make the corridor less practicable.

Notably, sufficient alignment alternatives exist in the East Bay to Central Valley Corridor that UPRR's position denying use of its rights-of-way would not per se render the Altamont Pass network alternatives infeasible at this programmatic level of analysis. The alternatives available for crossing east to west between Lathrop and the Niles/I-880 junction do, however, present constructability and operational issues that are not present for Pacheco Pass Network Alternative serving San Francisco via San Jose.

In summary, the position articulated by UPRR in its letters that it will not allow use of its rights-of-way for HST track reinforces, rather than detracts from, the designation of the Pacheco Pass Network Alternative Serving San Francisco via San Jose as the preferred alternative.

7.2.4 Effect of Avoiding Impacts to UPRR Freight Operations on Assessment of Alignment Alternatives

The new information and analysis in Chapter 4 of Volume 1 of the Revised Final Program EIR regarding the interface between proposed HST alignment alternatives and UPRR freight spurs identified that some secondary environmental impacts may occur as a result of measures to avoid or mitigate impacts to UPRR freight operations. This information does not differentiate between the network alternatives. As with the information in Chapters 2 and 3, the information in Chapter 4 regarding UPRR freight operations does not alter the designation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as the preferred alternative.

The Authority plans to avoid and/or minimize creating adverse impacts for freight operations by adhering to the following design practices in the project-level planning and environmental review process:

- HST alignments will be designed so as not to be located on UPRR operating rights of way where feasible. HST alignments will be grade separated from UPRR rights-of-way at those locations where HST alignments would need to cross over or under UPRR operating rights-of-way.
- HST alignments will be designed to minimize impacts to existing UPRR business-serving spurs where feasible. The Authority will work with UPRR to identify those locations where design of the HST alignment may affect these business-serving spurs and evaluate with UPRR the following options, and other options that UPRR may present.

To minimize impacts from HST to industrial spurs owned and/or operated by the UPRR, the Authority will consider ~~has committed to~~ the following strategies:

- The HST alignment will be grade-separated (trench, tunnel, or aerial) from the UPRR spur.
- ~~The Authority will negotiate with the UPRR to acquire the business serving spur.~~
- If possible, the spur will be reconstructed so as to reduce or eliminate the impact of HST operations on existing freight service not to interfere with HST or UPRR operations.
- The Authority will negotiate with UPRR and consider such options as may be suggested by UPRR to accommodate individual freight customer needs.

The secondary impacts of these options will be identified on a case-by-case basis in the project-level environmental review. At the program level, possible secondary impacts include, among others: (a) increased noise/vibration impacts and mitigation, (b) increased visual impacts, (c) additional community cohesion impacts, (d) additional property impacts.

7.3 Rationale for the Recommendation of the Preferred Alternative

This section replaces the rationale for recommending the Pacheco Pass Network Alternative serving San Francisco via San Jose and alignments and station locations in Chapter 8 of the 2008 Final Program EIR and the 2010 Revised Draft Program EIR. Most of the text remains the same, however, prior changes show in the Revised Draft Program EIR are incorporated for readability. As Chapter 8 of the 2008 Final Program EIR. Changes to the text between based on the 2010 Revised Draft and Final Program EIRs are shown with a bar in the margin; added text is noted with underlining and deleted text is noted with ~~strikeout~~.

7.3.1 Introduction

This section describes the Authority's preferred HST Network and Alignment Alternatives and station location options and evaluates Network Alternatives that supported the identification of the preferred alternative. This section replaces the rationale for recommending the Pacheco Pass Network Alternative serving San Francisco via San Jose and alignments and station locations in Chapter 8 of the 2008 Final Program EIR. Most of the text remains the same as Chapter 8 of the 2008 Final Program EIR; changes to text are shown with a bar in the margin, added text is noted with underlining, and deleted text is noted with ~~strikeout~~.

HST Network Alternatives represent different ways to combine HST Alignment Alternatives and station location options to implement the HST system in the study region. The 2008 Final Program EIR/EIS focused on analysis of HST Alignment Alternatives. Because there are many possible combinations of alignments and stations, 21 representative HST network alternatives were considered and described to better understand the implications of selection of certain alignment alternatives and station location options. The network alternatives were developed to enable an evaluation and comparison of how various combinations of alignment alternatives would meet the project's purpose and need, how each would perform as a HST network (e.g., travel times between various station locations, anticipated ridership, operating and maintenance costs, energy consumption, and auto trip diversions), and how each would impact the environment.

Chapter 7 of the 2008 Final Program EIR summarizes and compares the relative differences among physical and operational characteristics and potential environmental consequences associated with the HST alignment alternatives and station location options, including:

- Physical/operational characteristics
 - Alignment
 - Length
 - Capital Cost
 - Travel Time
 - Ridership
 - Constructability
 - Operational Issues
- Potential environmental impacts
 - Transportation related topics (air quality, noise and vibration, and energy)
 - Human environment (land use and community impacts, farmlands and agriculture, aesthetics and visual resources, socioeconomics, utilities and public services, hazardous materials and wastes)
 - Cultural resources (archaeological resources, historical properties) and paleontological resources

- Natural environment (geology and seismic hazards, hydrology and water resources, and biological resources and wetlands).
- Section 4(f) and 6(f) resources (certain types of publicly owned parklands, recreation areas, wildlife/waterfowl refuges, and historical sites).

In identifying a preferred alignment alternative, the Authority ~~was~~ is guided by adopted objectives and criteria for selecting preferred alignment alternatives and station location options that were also applied in the alignment screening evaluation (Table ~~7-1~~ ~~8.1-1~~ below).

**Table 7-1
Unchanged Table 8.1-1—High-Speed Rail Alignment and Station
Evaluation Objectives and Criteria**

Objective	Criteria
Maximize ridership/revenue potential	Travel time Length Population/employment catchment area Ridership and revenue forecasts
Maximize connectivity and accessibility	Intermodal connections
Minimize operating and capital costs	Length Operational issues Construction issues Capital cost Right-of-way issues/cost
Maximize compatibility with existing and planned development	Land use compatibility and conflicts Visual quality impacts
Minimize impacts on natural resources	Water resources impacts Floodplain impacts Wetland impacts Threatened and endangered species impacts
Minimize impacts on social and economic resources	Environmental justice impacts (demographics) Farmland impacts
Minimize impacts on cultural and parks/wildlife refuge resources	Cultural resources impacts Parks and recreation impacts Wildlife refuge impacts
Maximize avoidance of areas with geologic and soils constraints	Soils/slope constraints Seismic constraints
Maximize avoidance of areas with potential hazardous materials	Hazardous materials/waste constraints

In the 2008 Final Program EIR, the Federal Railroad Administration (FRA) concurred with the Authority's identification of the Pacheco Pass Network Alternative serving San Francisco via San Jose as the preferred alternative. The FRA identified the Pacheco Pass Network Alternative serving San Francisco via San Jose as environmentally preferable under NEPA, and the Authority identified it as environmentally superior under CEQA. The FRA has consulted with USEPA and USACE regarding their concurrence for compliance with the requirements of Section 404 of the Clean Water Act (Federal Railroad Administration 2008a). Although no permit is being requested at this time under the Clean Water Act, the U.S. Environmental Protection Agency (USEPA) and U.S. Army Corps of Engineers (USACE) have concurred that the identified preferred network alternative is most likely to yield the "least environmentally damaging practicable

alternative" (LEDPA) consistent with the USACE's permit program (33 CFR Part 320–331) and USEPA's Section 404(b)(1) Guidelines (40 CFR 230–233) (U.S. Environmental Protection Agency 2008; U.S. Army Corps of Engineers 2008). In addition, the FRA issued a record of decision in December 2008 selecting the Pacheco Pass Network Alternative serving San Francisco via San Jose for further study (Federal Railroad Administration 2008b).

After the conclusion of this revised program EIR process, the Authority and FRA will focus future project-level EIR and EIS analysis in the study region on alignment alternatives and station location options selected through this program environmental process. Site-specific location and design alternatives for the preferred alternative and station location options, including avoidance and minimization alternatives, will be fully investigated and considered during next tier project-level environmental review.

7.3.2 Summary of Comments on the Identification of the Preferred Alternative

Public input on the selection of a preferred alternative to connect the San Francisco Bay Area to the Central Valley has now occurred in two distinct stages. The initial public comment period on the Draft Program EIR/EIS took place in 2007, and the Authority's prior decision based on that document occurred in 2008. Public comment on the original Program EIR/EIS thus preceded the passage of Proposition 1A in November 2008. The Authority circulated its Revised Draft Program EIR between March and April 2010, providing a new opportunity for public comment on the new document. The following summarizes both sets of public input.

Comments on the Preferred Alternative in the 2007/2008 Program EIR Process and Following Passage of Proposition 1A

The identification of a preferred HST alignment between the Bay Area and Central Valley has been and continues to be ~~is~~ controversial. The 2008, ~~and this p~~ Program EIR/EIS process ~~has~~ received a considerable amount of comment from agencies (federal, state, regional, and local), organizations, and the general public. In 2008, there was a ~~There is~~ wide divergence of opinion with many favoring the Pacheco Pass, many favoring the Altamont Pass, and many favoring a combination of both passes (with the Pacheco serving as the north/south HST connection and Altamont primarily serving interregional commuter service between Sacramento/Northern San Joaquin Valley and the Bay Area).

A. PACHECO

In 2008, ~~t~~The Pacheco Pass supporters included the Metropolitan Transportation Commission (MTC), the cities of San Francisco, San Jose, Redwood City, Fremont, Morgan Hill, Cupertino, Sunnyvale, Gilroy, and Salinas; the counties of San Francisco, Santa Clara, San Mateo, and Monterey; Congress members Lofgren, Honda, Eshoo, and Lantos; Assembly member Beale; State Senators Alquist and Maldonado; the San Francisco County Transportation Agency; the Santa Clara Valley Transportation Authority (VTA); Peninsula Corridor (Caltrain) Joint Powers Board (JPB); San Mateo County Transit District (SamTrans); San Mateo County Transportation Authority (TA); Monterey County Transportation Agency; Alameda County Congestion Management Agency; Alameda County Supervisor Scott Haggerty; the San Jose, the San Francisco, Redwood City, and the San Mateo County Chamber of Commerce; the Silicon Valley Leadership Group; and a number of members of the public representing themselves.

There are a number of reasons supporters gave in 2008 for preferring the Pacheco Pass, including: 1) quicker travel times between San Jose/Silicon Valley and Southern California; 2) more frequent/better service between Bay Area and southern California; 3) higher ridership potential; 4) less potential environmental impacts; 5) avoiding impacts on wildlife and sensitive habitat through Don Edwards San Francisco Bay National Wildlife Refuge; 6) best serves the Caltrain Corridor (San Francisco to Gilroy); 7) provides good HST access for the three county Monterey Bay area with a south Santa Clara HST station; 8) can serve San Francisco, Oakland, and San Jose without a new

crossing of the Bay; 9) all service through San Jose/best serves south Bay; and 10) less cost for first phase of system between the Bay Area and Anaheim.

There are a considerable number of organizations, agencies, and individuals who, in 2008, have expressed concern regarding potential impacts on the GEA and/or the uninhabited portions of the Pacheco Pass by HST alternatives via the Pacheco Pass. These include the USFWS, CDFG, California Department of Parks and Recreation, Grassland Water District, Grassland Resources Conservation District, Grassland Conservation, Education & Legal Defense Fund, Ducks Unlimited, California Outdoor Heritage Alliance, California Waterfowl Association, Sacramento Area Council of Governments, Citizens' Committee to Complete the Refuge, Bay Rail Alliance, California Rail Foundation (CRF), California State Parks Foundation (CSPF), Defenders of Wildlife, Planning and Conservation League (PCL), Regional Alliance for Transit (RAFT), Sierra Club, Train Riders Association of California (TRAC), and Transportation Solutions Defense and Education Fund (TRANSDEF). California Department of Parks and Recreation raised concerns regarding potential impacts on State Parks and reserve resources through the Pacheco Pass. Between 2008 and March 2010, ~~There are~~ a considerable number of organizations, agencies, and individuals have expressed concern regarding potential impacts on the Caltrain Corridor. The town of Atherton opposes use of the Caltrain Corridor between San Jose and San Francisco and the Cities of Menlo Park and Millbrae ~~has~~ have raised concerns regarding potential impacts through their cities. The "Peninsula Cities Consortium" (which includes Palo Alto, Menlo Park, Atherton, Belmont, and Burlingame) was created after the November 2008 election as a result of concerns regarding potential impacts along the Caltrain Corridor including: alignment, environmental consequences, local growth, station planning and land use as well as noise and vibration, biological and cultural resources.

B. ALTAMONT

In 2008, ~~t~~The Altamont Pass supporters included the cities of Oakland, Union City, and Atwater; the town of Atherton; the counties of San Joaquin, Stanislaus, Mariposa, and Kern; the California Partnership for the San Joaquin Valley; the San Joaquin Regional Policy Council; Sacramento Area Council of Governments; San Joaquin County Council of Governments; Tulare County Association of Governments; Altamont Commuter Express (ACE); California Department of Parks and Recreation; California Environmental Coalition; California State Parks Foundation (CSPF); Planning and Conservation League (PCL); Sierra Club; Grassland Water District; Grassland Resources Conservation District; Grassland Conservation, Education & Legal Defense Fund; California Outdoor Heritage Alliance; Bay Rail Alliance; Transportation Involves Everyone (TIE); San Joaquin COG Citizens Advisory Committee; Tracy Region Alliance for a Quality Community; Ducks Unlimited; Transportation Solutions Defense and Education Fund (TRANSDEF); California Rail Foundation (CRF); Defenders of Wildlife; Regional Alliance for Transit (RAFT); Citizens' Committee to Complete the Refuge; Train Riders Association of California (TRAC); and a number of members of the public representing themselves.

There are a number of reasons supporters gave in 2008 ~~ive~~ for preferring the Altamont Pass including: 1) quicker travel times between Sacramento/Northern San Joaquin Valley and the Bay Area; 2) best serves the Central Valley; 3) more Northern San Joaquin markets served on the Authority's adopted first phase of construction between the Bay Area and Anaheim; 4) higher ridership potential; 5) less potential for environmental impacts; 6) avoids impacts on wildlife and sensitive habitat through Pacheco Pass and the GEA; 7) serves a greater population/more population along the alignment; 8) best serves ACE corridor and reduces traffic along I-580; 9) better service between Bay Area and Southern California (either reduced frequency is needed on shared Caltrain alignment or HST trains can be split); 10) best serves San Jose since it would be a terminus station and with much faster travel times to commuter markets in the Northern San Joaquin Valley; and 11) is less sprawl inducing.

There are a considerable number of organizations, agencies, and individuals who, in 2008, have expressed concern regarding potential impacts on the San Francisco Bay and Don Edwards San Francisco Bay National Wildlife Refuge by HST alternatives via the Altamont Pass using a Dumbarton Crossing. These include the MTC; BCDC; USEPA; USFWS; Don Edwards San Francisco Bay National Wildlife Refuge; Congress members Zoe Lofgren, Michael Honda, Anna Eshoo, and Tom Lantos; State Senators Elaine Alquist and Abel Maldonado; Assembly member Jim Beale; Santa Clara County; San Mateo County Transit District (SamTrans); San Mateo County Transportation Authority (TA); Peninsula Corridor (Caltrain) Joint Powers Board (JPB); San Francisco Bay Trail Project; San Jose Chamber of Commerce; San Francisco Bay Trail Project; the City of San Jose; the City of Oakland; and Don Edwards (Member of Congress, 1963-1995). The East Bay Regional Park District has raised concerns in regards to potential impacts on nine regional parks, in particular the Pleasanton Ridge and Vargas Plateau regional parks, and the Alameda Creek Regional Train between Pleasanton and Niles Junction for Altamont Pass alternatives. In addition, the City of Fremont opposes the Altamont Pass, and the City of Pleasanton does not support the Altamont Pass but remains "open" to terminating Altamont alternatives in Livermore. The MTC and Alameda County Supervisor Scott Haggerty also support the investigation of Altamont Pass alternatives terminating in Livermore.

C. COMBINED PACHECO AND ALTAMONT

After completing a two-year "Regional Rail" planning process, the MTC has re-confirmed support for the Pacheco alignment via the San Francisco Peninsula as "the main HSR express line between Northern and Southern California due to several of the reasons stated in Resolution N. 3198:

- has the highest statewide ridership demand, and best serves HSR's key market—Northern California to Southern California, connecting the two most congested regions in the state
- provides direct service to all three major cities—San Francisco, San Jose and Oakland
- avoids construction of a new bay crossing or tube required by the Altamont Pass entry for San Francisco service."

MTC's resolution also "endorse(s) the Altamont route as better suited to serve interregional and local travel between the Bay Area and the Northern San Joaquin Valley." It states:

At the same time the Pacheco pass alignment is being built, the CHSRA should upgrade interregional services between Peninsula—Tri Valley—Sacramento & San Joaquin Valley. As a first step, ACE service can be improved by adding tracks and improving signaling to provide higher speed and more reliable service that would connect with a future BART station in Livermore (Greenville Road or Isabel/Stanley based on further BART analyses); these improvements would need to be compatible with future HSR. An electrified regional train capable of higher speeds, with additional grade separations that would improve road circulation, would replace longer-term, ACE service; the trains would also be compatible with lightweight equipment operating in the Dumbarton Corridor.... [MTC] request[s] that the CHSRA also evaluate an alternative in the Altamont Corridor that terminates HSR at a proposed BART Livermore station where HSR passengers could be dispersed to Bay Area locations throughout the BART system, together with improved ACE service to Santa Clara County... [and] ... request[s] that CHSRA consider seeking additional HSR bond funds dedicated to upgrading the Altamont corridor for regional service.

The Tri-Valley Policy Working Group and Technical Advisory Committee (Tri-Valley PAC) took a similar position. Tri-Valley PAC is a partnership that includes the cities of Dublin, Livermore, Pleasanton, Danville, San Ramon, and Tracy along with transportation providers LAVTA, ACE, and BART. The Tri-Valley supports "continued study of high speed rail through the Altamont Corridor on the Union Pacific corridor **PROVIDED**:

- There are no significant Right-of-Way takes.

- There is no major aerial structure through Pleasanton.”

In addition, the Tri-Valley PAC provided the following comments for consideration by the Authority:

The Draft Bay Area EIR/EIS includes a Bay Area HSR alignment that would include High Speed Train service through the Pacheco Pass and regional overlay service provided through the Altamont pass. The Policy Advisory Committee believes that this option may present the best way of addressing our concerns and delivering optimal HST service to the region as a whole.

The combined Altamont/Pacheco(Hybrid) alignment option allows HSR to provide frequent service along the most direct route between northern and southern California, while still serving the important regional transportation corridors in Northern California, including those in the Central Valley, the Tri-Valley, and between Sacramento and the Bay Area. The Draft EIR/EIS demonstrates that the corridors served by the Altamont alignment include some of the greatest travel demand in the entire system.

While providing these important transportation advantages, a system that provides service in both major corridors also mitigates some of the possible negative impacts identified in the Draft EIR/EIS. Specifically related to the Tri-Valley's key concerns, it would improve the likelihood that HST service could be delivered within the existing Union Pacific Right-of-Way without the need for major aerial infrastructure, or significant right-of-way acquisition through the developed portions of the Tri-Valley.

U.S. Congressman Jim Costa stated that he'd rather not view this as one route over another. He would rather the Valley see a vision for both, and the Capitol Corridor JPB supports “in principle the concept of the two high-speed alignments into and out of the Bay Area. Each alignment would provide a means to meet the high-speed travel markets for (1) long distance travelers from Los Angeles/Southern California using the Pacheco Pass route and (2) the interregional travelers from the Central Valley using the Altamont Pass route.” The MTC recommendations were ~~are~~ also supported by the Alameda County Congestion Management Agency and Alameda County Supervisor Scott Haggerty.

While the Silicon Valley Leadership Group and the City of San Jose strongly support the Pacheco Pass and the HST link between northern and southern California, they also support high-speed commuter service/improvements to ACE service via the Altamont Pass, and while the California Partnership for the San Joaquin Valley strongly prefers the Altamont Pass, they also commented that the Authority “evaluate the economic feasibility of developing both the Altamont and Pacheco Pass routes to see if each one of those routes, on its own merits, will generate an economic surplus. If it does, then we would like to see both routes implemented.” They also stated, “if it turns out that one of the two routes must be implemented first, they cannot be implemented concurrently, then our strong preference is for the Altamont route.” However, some members of the public have expressed opposition to the “hybrid” idea (Pacheco and Altamont) raising issue with the additional costs and concern that only one pass would be implemented.

The USEPA recommended “eliminating from further consideration a high speed rail alternative connecting Bay Area to Central Valley that includes both an Altamont and a Pacheco Pass alignment, termed, “*Pacheco Pass with Local Service*” in the Draft PEIS. This scenario would effectively result in twice the habitat fragmentation, noise, and indirect impacts to aquatic resources. This alternative would likely result in CWA Section 404 permitting challenges because it is difficult to demonstrate that mountain crossings at both Pacheco and Altamont Passes represent the LEDPA given the increased indirect impacts to aquatic resources and habitat fragmentation associated with this alternative.”

Comments on the Preferred Alternative in the 2010 Revised Program EIR Process

The Authority received extensive comments on the 2010 Revised Draft Program EIR from agencies (state, regional, and local), organizations, and the general public during the public comment period. The comments were contained in more than 540 comment letters containing more than 3750 individual comments. In contrast to 2008, when the comments received showed a clear preference for the Pacheco Pass, the Altamont Pass, or both passes, the public comments in 2010 are substantially more complex. Support remains for the Pacheco Pass Network Alternative serving San Francisco via San Jose, however, the Authority received many comments expressing great concern about this network alternative. The expressions of concern were most often accompanied by the commenter advocating for any option other than the Pacheco Pass Network Alternative serving San Francisco via San Jose. Support also remains for Altamont Pass network alternatives. The following provides a general summary of the comments that can be reviewed in full in Volume 2 of the Revised Final Program EIR:

- A. Pacheco:** In 2010, the following entities identified in writing their support for the Pacheco Pass Network Alternative serving San Francisco via San Jose: Santa Clara Valley Transportation Authority; City of San Jose; Transportation Agency for Monterey County; City of Gilroy; Santa Cruz County Regional Transportation Commission; Metropolitan Transportation Commission; San Francisco Chamber of Commerce; and San Mateo County Economic Development Assn. Many individuals expressed support for the Pacheco Pass Network Alternative serving San Francisco via San Jose either in writing or at the public comment meeting in April in San Jose.
- B. Altamont:** In 2010, the following entities identified in writing their support for one of the Altamont Pass network alternatives: Town of Atherton; Palo Alto Central East Residential Association; Transportation Solutions Defense and Education Fund (TRANSDEF); California Rail Foundation; Planning and Conservation League; and Natural Resources Defense Council. Many individuals expressed support for Altamont Pass alternatives either in writing or at the public comment meeting in April in San Jose.
- C. No Project Alternative, No Caltrain Corridor Alternatives, Caltrain Below Grade Alternatives:** In 2010, the following entities advocated for other options, such as stopping either a Pacheco or Altamont alternative in San Jose or Union City, utilizing a non-Caltrain alignment such as 101 or 280 to reach San Francisco, or placing a Caltrain alignment below grade in a tunnel or covered trench: City of Burlingame; City of Menlo Park; Planning and Conservation League. Many comments from individuals who identified themselves as residents along or near the Caltrain Corridor between San Francisco and San Jose advocated for all three options.

7.3.3 Network Alternatives Evaluation

The purpose of the HST system is defined in Chapter 1 of the 2008 Final Program EIR/EIS as follows: The purpose of the Bay Area HST is to provide a reliable high-speed electrified train system that links the major Bay Area cities to the Central Valley, Sacramento, and Southern California, and that delivers predictable and consistent travel times. Further objectives are to provide interfaces between the HST system and major commercial airports, mass transit, and the highway network and to relieve capacity constraints of the existing transportation system in a manner sensitive to and protective of the Bay Area to Central Valley region's and California's unique natural resources.

Chapter 1 of the 2008 Final Program EIR/EIS also outlines the objectives that the Authority has adopted, including, "maximize intermodal transportation opportunities by locating stations to connect with local transit, airports, and highways" and states that the Authority's statutory mandate is to plan, build, and operate a HST system that is "coordinated with the state's existing transportation network, particularly intercity rail and bus lines, commuter rail lines, urban rail transit lines, highways, and airports."

The 21 network alternatives described in the 2008 Final Program EIR/EIS present information about overall effects of combinations of HST Alignment Alternatives and station location options to implement the HST system in the study region. The 21 network alternatives fall among the three basic approaches for linking the Bay Area and Central Valley: Altamont Pass (11 network alternatives); Pacheco Pass (six network alternatives); and Pacheco Pass with Altamont Pass (local service) (four network alternatives). The network alternatives vary in the degree they serve urban areas/centers and international airports. All but one would provide direct HST services to (i.e., include a HST station within) one and up to three of the major urban centers in the Bay Area—San Francisco, San Jose, and Oakland. Some of the network alternatives would provide service to one or more of the three Bay Area international airports at San Francisco, Oakland, and San Jose. Connectivity and enhancement of other transit systems (e.g. ACE, Caltrain, Capitol Corridor, BART, and Valley Transportation Authority) also vary greatly among the network alternatives.

Overall, implementing the HST system would greatly increase the capacity for intercity and commuter travel and reduce existing automobile traffic in specific travel corridors. Full grade-separation along Bay Area rail corridors used by the HST would improve local traffic flow and reduce air pollution at existing rail crossings. The more extensive the HST system implemented in the Bay Area, the greater the travel condition benefits, including increased connectivity to other transit systems, increased convenience, increased reliability, and improved travel times. In particular, more direct connections to the region's airports provide increased connectivity for air transportation system riders.

Recognizing the benefits described above, as well as other attributes, the cities of San Francisco, Oakland, and San Jose all strongly support direct HST service to their respective downtowns. This support was expressed as comments on the 2008 Final Draft Program EIR/EIS, and is consistent with comments/input provided by these cities over the ten years since the Authority was created. MTC, the regional transportation planning and programming agency for the Bay Area, supports direct HST service to the downtowns of each of these three major Bay Area urban centers.

A number of network alternatives clearly do not meet the purpose and need for the HST system as fully as others. The Altamont Pass network alternative that terminates in Union City does not fully meet the purpose and need ~~fails~~ since it does not provide direct HST service to San Francisco, Oakland, or San Jose (the major Bay Area cities) nor does it provide interface with the major commercial airports. Also less able to meet the purpose and need ~~falling~~ are a Pacheco Pass network alternative that terminates in San Jose and three Altamont Pass network alternatives that only serve one of the three major urban areas/centers. These four alternatives directly provide HST service to at most only one major Bay Area city and one of the region's major commercial airports.

A. PACHECO PASS NETWORK ALTERNATIVES EVALUATION

Six representative Pacheco Pass network alternatives were investigated. These six alternatives encompass the range of different ways to combine HST Alignment Alternatives and station location options to implement the HST system via the Pacheco Pass. All six Pacheco Pass network alternatives provide direct service to downtown San Jose. The Pacheco Pass network alternatives consist of: 1) HST to San Francisco via the San Francisco Peninsula; 2) HST to Oakland via the East Bay; 3) HST to San Francisco via the San Francisco Peninsula and to Oakland via the East Bay (no bay crossing); 4) HST terminating in San Jose; 5) HST to San Francisco via the peninsula and then to Oakland via a new transbay tube; and 6) HST to Oakland via the East Bay and then to San Francisco via a new transbay tube. As previously explained, the alternative that would terminate in San Jose and not serve either San Francisco or Oakland directly does not fully meet the purpose and need for the proposed HST system.

The Pacheco Pass alternatives with the greatest environmental impacts and greatest construction issues are the two alternatives that include a new transbay tube. These alternatives would have over 36 acres of potential direct impacts on the San Francisco Bay. To put this into perspective, these

alternatives would have 40.3–41 ac of potential impacts on waterbodies (lakes + San Francisco Bay), whereas the preferred Pacheco Pass alternative (HST to San Francisco via the San Francisco Peninsula) would have only 3.8 ac of potential direct impacts. The cost of the additional 8.8-mile HST segment needed to implement a new transbay tube is estimated at about \$4.6 billion (2006 dollars)—over \$500 million per mile. Moreover, there is only slightly higher ridership and revenue potential (about 2% higher ridership or 1.9 million passengers per year by 2030) when comparing the transbay tube alternative via the San Francisco Peninsula versus the preferred alternative. To implement alternatives that included a new transbay tube, extensive coordination would be required with the USACE under Section 10 of the Rivers and Harbors Act, USFWS, and the California Coastal Commission. Crossing the Bay would also be subject to the USACE, CDFG, and BCDC permit process.

The preferred Pacheco Pass alternative (serving San Francisco via the San Francisco Peninsula) has similar potential environmental impacts as the Oakland to San Jose via the East Bay alternative. Both alternatives maximize the use of existing transportation corridors and avoid impacts on the San Francisco Bay. The preferred alternative to San Francisco would have slightly less potential impacts on wetlands (15.6 ac vs. 17.4 ac), waterbodies (3.8 ac vs. 4.5 ac), and streams (20,276 linear ft. vs. 21,788 linear ft.) but would have slightly more potential impacts on floodplains (520.8 ac vs. 477.5 ac) and species (plant and wildlife), and would potentially impact a greater number of cultural resources (168 vs. 106) than the Pacheco Pass alternative to Oakland via the East Bay. Both alternatives would have high ridership potential and similar costs. The alternative to downtown San Francisco (Transbay Transit Center) is forecast to have about 2.3% (2.17 million riders per year by 2030) higher ridership potential than the alternative to Oakland (West Oakland), but is estimated to cost about 7.1% more (\$840 million in 2006 dollars).

The Oakland and San Jose via the East Bay alternative has considerable logistical constraints. In its adopted Regional Rail Plan for the San Francisco Bay Area, the MTC raised certain issues associated with an East Bay HST alignment to Oakland and San Jose and are not recommending an East Bay alignment. The Authority and FRA examined these and other issues as discussed below and concurred with MTC's evaluation of not recommending an East Bay alignment:

- Right-of-Way Constraints and Duplicate Investment – Commitments have already been made to improve Capitol Corridor service and to extend BART to San Jose but these improvements would not be compatible with HST service, which would need to use separate tracks. Non-electric, conventional Capitol Corridor trains will continue to share track with standard freight services in the constrained UPRR owned right-of-way. When fully developed, BART and Capitol Corridor will provide complementary rail options with BART serving more local stops and Capitol Corridor primarily serving regional stops. The capital cost of the East Bay line segment is approximately \$4.9 billion (2006 dollars).
- Risk of UPRR Right-of-Way Agreement – The risk of reaching an agreement from UPRR to obtain the right to construct additional tracks for the HST along the Niles Subdivision where the high-speed alignment is proposed between Mission Boulevard and Oakland is high.
- Potential Environmental Justice Concerns – The environmental screening in the MTC Regional Rail Plan indicated potential concerns with construction of a new elevated alignment through existing urbanized areas especially in the East Bay between Fremont and Oakland.
- Right-of-Way Constraints within I-880 – The East Bay alignment segment south of Fremont would need to be constructed along I-880 freeway south of Mission Boulevard towards San Jose with the potential for a long process with Caltrans to define and construct the elevated HST trackway within the freeway right-of-way. Caltrans has serious concerns about construction within the constrained median.

The Pacheco Pass alternative that serves San Francisco, Oakland, and San Jose without a new bay crossing provides the highest level of connectivity and accessibility to the Bay Area of the Pacheco

Pass Alternatives by directly serving the three major Bay Area urban centers, serving both the San Francisco Peninsula and the East Bay, and providing good connectivity to the region's three international airports (SFO, Oakland, and San Jose). However, this alternative has greater environmental impacts and greater costs (\$3.6 billion more in 2006 dollars) than the preferred alternative since it requires over 42 additional miles of HST alignment to be constructed along the East Bay and would have the same logistical constraints as described above for the Oakland and San Jose via the East Bay alternative. In addition, because this alternative would split the frequency of the HST services (express, suburban express, skip-stop, local, and regional) between the San Francisco Peninsula and the East Bay, this resulted in somewhat less ridership and revenue projected for this alternative as compared to the preferred Pacheco Pass alternative (7.8 million passengers a year by 2030 representing 8.4% of the preferred alternative's ridership).

The Pacheco Pass alternative to downtown San Francisco via the San Francisco Peninsula is preferred because it provides HST direct service to downtown San Francisco, SFO, and the San Francisco Peninsula while minimizing potential environmental impacts and logistical constraints by maximizing use of existing rail right-of-way through shared-use with improved Caltrain commuter services. The HST is complementary to Caltrain (which intends to use lightweight electrified trains) and would share tracks with express Caltrain commuter rail services. In addition, this alternative provides direct service to northern California's major hub airport at SFO and major transit, business, and tourism center at downtown San Francisco, and would enable the early implementation of the HST/Caltrain section between San Francisco, San Jose, and Gilroy. This alternative also involves comparatively less interface with UPRR than the most promising Altamont Pass alternatives.

~~The City and County of San Francisco, San Francisco County Transportation Authority, Peninsula Corridor (Caltrain) Joint Powers Board (JPB), San Mateo County Transit District (SamTrans), San Mateo County Transportation Authority (TA), City of Gilroy, City of Redwood City, County of Monterey, and City of Morgan Hill all support HST to San Francisco via San Jose and the San Francisco Peninsula (Caltrain Corridor)—the staff recommended alternative.~~ The MTC recommends use of the Pacheco Pass via the San Francisco Peninsula "as the main HSR express line between Northern and Southern California" but their recommendation also includes a new transbay tube to bring direct service to Oakland. MTC recommends that the first step in implementing HST in Northern California and the Bay Area is "investment in the Peninsula trackage with regional and high-speed rail funding can make this corridor high-speed rail ready," noting that Caltrain intends to use lightweight electrified trains that would be compatible with HST equipment.

B. ALTAMONT PASS NETWORK ALTERNATIVES EVALUATION

Eleven representative Altamont Pass network alternatives were investigated. These 11 alternatives encompass the range of different ways to combine HST Alignment Alternatives and station location options to implement the HST system via the Altamont Pass. The Altamont Pass network alternatives consist of: 1) HST to San Francisco (via Dumbarton) and San Jose (via I-880); 2) HST to Oakland and San Jose via the East Bay; 3) HST to San Francisco (via Dumbarton) and Oakland and San Jose via the East Bay; 4) HST terminating in San Jose; 5) HST terminating in to San Francisco; 6) HST terminating in Oakland; 7) HST terminating in Union City; 8) HST to San Francisco and San Jose via San Francisco Peninsula (and Dumbarton crossing); 9) San Francisco and San Jose, Oakland—no Bay Crossing; 10) Oakland and San Francisco—via transbay tube; and 11) San Jose, Oakland and San Francisco—via transbay tube. The four Altamont Pass network alternatives that would terminate in Union City or provide direct service to only one of the three major urban centers of the Bay Area (San Francisco, San Jose, and Oakland) do not fully meet the purpose and need for the proposed HST system.

The two Altamont Pass network alternatives that require a new transbay tube would have high potential environmental impacts and considerable construction issues. These alternatives would have over 36 acres of potential direct impacts on the San Francisco Bay. They would have 38.8 ac of

potential impacts on waterbodies (lakes + San Francisco Bay) whereas the Oakland and San Jose Termini Altamont Pass network alternative would have only 2.3 ac of potential direct impacts. The cost of the additional 8.8-mile HST segment needed to implement a new transbay tube is estimated at about \$4.6 billion (2006 dollars)—over \$500 million per mile. Moreover, there is only slightly higher ridership and revenue potential (less than 2% higher ridership or 1.0–1.6 million passengers per year by 2030) when comparing the transbay tube alternative via the East Bay versus the related Altamont Pass network alternative that terminates in Oakland. To implement alternatives that included a new transbay tube, coordination would be required with the USACE under Section 10 of the Rivers and Harbors Act, USFWS, and the California Coastal Commission. Crossing the Bay would also be subject to the USACE, CDFG, and BCDC permit process.

The Altamont Pass network alternative that serves San Francisco, Oakland, and San Jose (with a Dumbarton crossing) provides a high level of connectivity and accessibility to the Bay Area by directly serving the three major Bay Area urban centers, serving both the San Francisco Peninsula and the East Bay, and providing good connectivity to the region's three international airports (SFO, Oakland, and San Jose). However, this alternative has greater environmental impacts, logistical constraints, and costs (\$2.4 billion more in 2006 dollars) than the San Francisco and San Jose Termini Altamont Pass alternative since it requires nearly 38 additional miles of HST alignment to be constructed along the east bay. In addition, because this alternative would further split the frequency of the HST services (express, suburban express, skip-stop, local, and regional) between San Francisco, San Jose, and Oakland (a three way split east of Niles Junction) this resulted in somewhat less ridership and revenue projected for this alternative as compared to the San Francisco and San Jose Termini Altamont Pass network alternative (about 6.8 million passengers a year by 2030 representing 7.7% of the other alternative's ridership).

The Altamont Pass network alternative that serves San Francisco, Oakland, and San Jose—no Bay Crossing provides a high level of connectivity and accessibility to the Bay Area by directly serving the three major Bay Area urban centers, serving both the San Francisco Peninsula and the East Bay, and provides good connectivity to the region's three international airports (SFO, Oakland, and San Jose). However, this alternative has greater environmental impacts and greater costs (\$4.5 billion more in 2006 dollars) than the Oakland and San Jose Termini Altamont Pass alternative since it requires over 62 additional miles of HST alignment to be constructed along the San Francisco Peninsula. In addition, this alternative results in non-competitive travel times from San Francisco, SFO, or Palo Alto/Redwood City to the HST stations to the south including Bakersfield, Los Angeles, Anaheim, Riverside, and San Diego. The non-competitive travel times to San Francisco and the San Francisco Peninsula resulted in somewhat less ridership and revenue projected for this alternative as compared to the Oakland and San Jose Termini Altamont Pass network alternative (about 2.8 million passengers a year by 2030 representing over 3.1% of the other alternative's ridership).

There are considerable trade-offs in comparing the three most promising Altamont Pass network alternatives: San Francisco and San Jose Termini; Oakland and San Jose Termini; and San Francisco and San Jose—via San Francisco Peninsula. Of these three Altamont Pass network alternatives, the Oakland and San Jose Altamont Pass network alternative is estimated to have the least potential environmental impacts predominately because the other two alternatives require a Bay crossing at Dumbarton. The Oakland and San Jose Termini network alternative is estimated to have fewer potential impacts on waterbodies (2.3 ac vs. 39.6 ac), wetlands (12.3 ac vs. 44.4-45.9 ac), special status plant species (40 vs. 56), special status wildlife species (44 vs. 50), non-wetland waters (14,032 linear ft. vs. 15,947-16,773 linear ft.), and cultural resources (128 vs. 149-180) than the two network alternatives serving San Francisco and San Jose Termini. Constructing a new bridge or tube crossing along the Dumbarton corridor would involve major construction activities in sensitive wetlands, saltwater marshes, and aquatic habitat, requiring special construction methods and mitigations. All the Dumbarton crossing alternatives would result in direct impacts on Don Edwards San Francisco Bay National Wildlife Refuge and would have potential direct impacts on 15 special-

status plant and 21 special-status wildlife species. To implement this alternative across the bay, extensive coordination would be required with the USACE under Section 10 of the Rivers and Harbors Act and the California Coastal Commission and the Bay crossing would be subject to the USACE, CDFG, and BCDC permit process. BCDC scoping comments note that bridge alternatives that could have adverse impacts on Bay resources can only be approved by BCDC "if there is not an alternative upland location for the route and if the fill in the minimum necessary to achieve the purposes of the project" (BCDC scoping response, December 15, 2005).

The major issues with Oakland and San Jose network alternative are the logistical constraints previously described (Section 7.3 A) along the East Bay, and that it does not provide direct HST service to SFO (northern California's major hub airport), the San Francisco Peninsula (Caltrain Corridor), and downtown San Francisco, the major transit, business, and tourism center of the region. Service utilizing the Caltrain corridor better satisfies the purpose and need of the HST and also best supports the Authority's adopted phasing plan. The two Altamont Pass alternatives to San Francisco and San Jose have similar environmental impacts and costs. However, the San Francisco and San Jose Termini network alternative would offer quicker travel times to San Jose than the San Francisco and San Jose—via the San Francisco Peninsula (2 hours 19 minutes vs. 2 hours 37 minutes for SJ-LA; and 49 minutes vs. 1 hour and 3 minutes SJ-Sacramento). The Peninsula route would have slightly higher ridership (2.85 million additional riders).

~~The City of Oakland supports direct service to the West Oakland station option via the Altamont Pass. The City of Union City supports direct service to Union City via Altamont Pass. The City of Fremont opposes the Altamont Pass alternatives, but in particular opposes the east-west alignment through Fremont (for Altamont Pass alternatives to San Francisco via Dumbarton). Congress members Zoe Lofgren, Michael Honda, Anna Eshoo, and Tom Lantos; State Senators Elaine Alquist and Abel Maldonado; and Assembly member Jim Beale as well as Santa Clara County, San Jose Chamber of Commerce, Don Edwards, and the City of San Jose all oppose HST alternatives requiring a Dumbarton crossing through the Don Edwards San Francisco Bay National Wildlife Refuge. The City of Oakland, USEPA, USFWS, BCDC, and San Francisco Bay Trail Project also raised concerns regarding potential impacts on Don Edwards San Francisco Bay National Wildlife Refuge and a new crossing of the bay. The City of Pleasanton, Alameda County Congestion Management Agency, and Alameda County Supervisor Scott Haggerty as well as the MTC support the future investigation of terminating Altamont Pass HST alternatives in Livermore. Rail advocacy groups such as the Bay Rail Alliance support the Altamont San Francisco and San Jose Termini network alternative.~~

The Bay Area Regional Rail Plan adopted by MTC favors the San Francisco and San Jose—via the San Francisco Peninsula Altamont Pass alternative because this alternative would utilize the Caltrain alignment between San Francisco and San Jose and would "maximize the partnership opportunities with CHSRA, could be incrementally developed, provides consistency with existing plans and minimizes duplication with committed plans and investments" (MTC, Sept 2007, pg 86). However, the MTC preference for Altamont also includes an ultimate connection to Oakland from San Francisco via a new transbay tube.

C. PACHECO PASS WITH ALTAMONT PASS (LOCAL SERVICE) NETWORK ALTERNATIVES EVALUATION

Four representative Pacheco Pass with Altamont Pass (local service) network alternatives were investigated. These four alternatives encompass the range of different ways to combine HST Alignment Alternatives and station location options to implement the HST system via the Pacheco Pass while also providing local HST service via the Altamont Pass. The Pacheco with Altamont Pass (local service) network alternatives consist of: 1) HST with San Francisco and San Jose Termini; 2) HST with Oakland and San Jose Termini; 3) HST with San Francisco, San Jose, and Oakland Termini (without Dumbarton Bridge); and 4) HST terminating in San Jose. The Pacheco Pass and Altamont Pass (local service) network alternative that would terminate in San Jose does not serve either San

Francisco or Oakland directly and does not fully meet the purpose and need for the proposed HST system.

The network alternative to Oakland and San Jose is estimated to be the least costly of the remaining three network alternatives serving both the Pacheco and Altamont passes (\$2.3 billion in 2006 dollars less than the alternative serving San Francisco and San Jose), would have the least environmental impacts, and would have high ridership potential, but it would not provide direct HST service to downtown San Francisco, SFO, and the San Francisco Peninsula (Caltrain Corridor) between San Francisco and San Jose. The network alternative to San Francisco and San Jose is estimated to have the highest ridership potential (3.27 million passengers a year by 2030 higher than the Oakland and San Jose alternative) but is also estimated to have the highest environmental impacts since it would require a new crossing at Dumbarton. The network alternative to San Francisco, Oakland, and San Jose (without Dumbarton Bridge) would have the highest costs (\$4.4 billion more in 2006 dollars than the Oakland and San Jose alternative), and the least ridership potential (8.34 million passenger a year by 2030 less than the San Francisco and San Jose alternative), but would provide direct HST service to Oakland, San Francisco, and San Jose and the region's three international airports without requiring a new bay crossing.

The Pacheco Pass with Altamont Pass (local service) network alternatives do not compare well against either the Pacheco Pass or Altamont Pass network alternatives in the Draft Program EIR/EIS for HST service to be provided by the Authority. These network alternatives resulted in similar ridership and revenue forecasts (with less revenue than comparable Pacheco Pass network alternatives) while having considerably higher capital costs (\$4.4–6.0 billion more in 2006 dollars for comparable terminus station locations). Although the Pacheco Pass with Altamont Pass (local service) alternatives would increase connectivity and accessibility by potentially providing direct HST service to additional markets, these alternatives would have higher environmental impacts, construction issues, and logistical constraints than Altamont or Pacheco Pass alternatives. The USEPA concluded that the Pacheco Pass with Altamont Pass (local service) network alternatives are not likely to contain the Least Environmentally Damaging Alternative (LEDPA).

D. COMPARISON OF PACHECO PASS AND ALTAMONT PASS ALTERNATIVES

Public Input: There has been and continues to be is a wide divergence of opinion for the selection of the alignment between the Bay Area and Central Valley. The public comment the Authority received in 2008 involved with many favoring the Pacheco Pass, many favoring the Altamont Pass, and many favoring doing both passes (with the Pacheco serving as the north/south HST connection and Altamont primarily serving interregional commuter service between Sacramento/Northern San Joaquin Valley and the Bay Area). San Francisco, Oakland, and San Jose, the three major urban centers of the Bay Area, all wanted direct HST service. The Central Valley (including Sacramento) and many transportation and environmental organizations strongly preferred the Altamont Pass, whereas much of the Bay Area (MTC, San Francisco, San Jose, San Francisco Peninsula, and Monterey Bay Area) agencies strongly supported the Pacheco Pass. Opposition has been raised to potential impacts for both the Pacheco Pass (impacts on the GEA, Pacheco Pass, Town of Atherton, Palo Alto, Menlo Park, and Millbrae), and the Altamont Pass (impacts on the San Francisco Bay, Don Edwards San Francisco Bay National Wildlife Refuge, East Bay regional parks, the City of Fremont, City of Livermore, and the City of Pleasanton). In 2010, many cities on the San Francisco Peninsula provide public comment advocating an Altamont Pass alternative, a Pacheco or Altamont alternative stopping in San Jose or Union City, or a Pacheco Pass alternative that would use a non-Caltrain alignment to reach San Francisco from San Jose. A very large number of letters from individuals residing along the Caltrain Corridor and the San Francisco Peninsula expressed great concern over impacts to their communities, with many endorsing no project, a different location, or an underground option.

Ridership and Revenue: The HST ridership and revenue forecasts done by MTC in partnership with Authority concluded that both the Pacheco Pass and Altamont Pass network alternatives have high ridership and revenue potential. Distinct differences were found between the Pacheco Pass and Altamont Pass for certain markets, and the sensitivity tests help in the selection of alignment alternatives and station location options within the corridors studied. Nonetheless, while additional forecasts with different assumptions may result in somewhat different results, the bottom-line conclusion is expected to remain the same: both the Pacheco Pass and Altamont Pass have high ridership potential. This overall conclusion is consistent with the previous ridership analysis done for the Authority's Business Plan (June 2000). It is the conclusion of this analysis that both the Pacheco Pass and Altamont Pass alternatives have high ridership potential and that ridership and revenue do not differentiate between these alternatives.

Capital and Operating Costs: Capital and operating costs are not substantially different between the Pacheco Pass and Altamont Pass alternatives that meet the purpose and need of the proposed HST system and serve similar termini stations. It is therefore the conclusion of this analysis that capital and operating costs do not differentiate between the Pacheco Pass and Altamont Pass alternatives.

Travel Times/Travel Conditions: Either the Pacheco Pass or Altamont Pass would provide quick, competitive travel times between northern and southern California. The Pacheco Pass would provide the quickest travel times between the south Bay and southern California (10 minutes less than the Altamont alternatives serving San Jose via the East Bay [I-880], and 28 minutes less than the Altamont San Francisco and San Jose—via San Francisco Peninsula alternative for express service). The Pacheco Pass enables a potential station in southern Santa Clara County (at Gilroy or Morgan Hill), which provides superior connectivity and accessibility to south Santa Clara County and the three Monterey Bay counties and utilizes the entire Caltrain corridor between San Francisco and Gilroy. San Francisco and San Jose would be served with one HST alignment along the Caltrain corridor providing the most frequent service to these destinations, whereas the most promising Altamont Pass alternatives would require splitting HST services (express, suburban express, skip-stop, local, regional) between two branch lines to serve San Jose and either San Francisco or Oakland. The Altamont Pass would provide considerably quicker travel times between Sacramento/Northern San Joaquin Valley and San Francisco or Oakland than the Pacheco Pass (41 minutes less between San Francisco and Sacramento for express service). The Altamont alternatives using the East Bay to San Jose would have express travel times about 29 minutes less than the Pacheco pass between Sacramento and San Jose, while the Altamont San Francisco and San Jose—via the San Francisco Peninsula alternative would take 15 minutes less than the Pacheco Pass for this market. The Altamont Pass would enable a potential Tri-Valley HST station and a potential Tracy HST station, which provide superior connectivity to the Tri-Valley/Eastern Alameda County, Contra Costa County, and the Tracy area and provide for the opportunity for shared infrastructure with an improved ACE commuter service, although additional infrastructure would be necessary for commuter overlay service with associated impacts. The Altamont Pass would have more potential Central Valley stations served on the Authority's adopted first phase for construction between the Bay Area and Anaheim (Tracy and Modesto). The travel time for direct service and travel conditions would be significantly different between the Altamont Pass alternative to Oakland and San Jose in comparison to the other two promising Altamont alternatives and the preferred Pacheco Pass alternatives (which directly serve San Francisco and San Jose). The Oakland and San Jose alternative would provide superior travel times, connectivity and accessibility to Oakland, Oakland International Airport, and the East Bay, but would not directly serve downtown San Francisco, SFO, or the San Francisco Peninsula/Caltrain Corridor.

Constructability Issues and Logistical Constraints: There are constructability issues and logistical constraints with both the Pacheco and Altamont pass alternatives. However, the construction related issues and logistical constraints associated with the Altamont Pass alternatives

are greater than those for the Pacheco Pass. All Altamont Pass alternatives have considerable constructability issues through the right-of-way constrained Tri-Valley area (Livermore and Pleasanton) and tunneling/seismic issues in the Pleasanton Ridge/Niles Canyon area. All Altamont Pass alternatives have tunneling/seismic issues (Calaveras Fault) in the Pleasanton Ridge as well as seismic issues in the East Bay (Hayward Fault). For direct service to San Francisco, the most promising Altamont Pass alternatives require a new Bay Crossing at Dumbarton, which must also go through the Don Edwards San Francisco Bay National Wildlife Refuge and the City of Fremont (which opposes construction of the east-west link through Fremont). For the Altamont Pass alternative serving Oakland, the MTC concluded that “development of an East Bay option with direct service to San Jose and Oakland would include significant right-of-way risk gaining an agreement from UPRR to provide access to Oakland.” For the Altamont Pass east bay link to San Jose, Caltrans District 4 has commented that use of the I-880 median would result in significant construction stage impacts between Fremont and San Jose. In addition, UPRR’s position denying use of its rights-of-way for HST tracks presents a greater implementation challenge for the Altamont Pass network alternatives than for the Pacheco Pass Network Alternative serving San Francisco via San Jose. The Pacheco Pass requires coordination and shared-use on the Caltrain corridor and would have tunneling and environmental issues through the Pacheco Pass, as well as require aerial structures and other design refinements and mitigation measures to minimize or avoid potential impacts on the GEA.

Environmental Impacts: The preferred Pacheco Pass alternative would have greater potential impacts on acres of farmlands than the most promising Altamont Pass alternatives (1,372 ac vs. 758 – 764 ac) and potentially impact more acres of floodplains (521 ac vs. 219-318ac) and more linear feet of streams (20,276 linear ft vs. 16,824–17,660 linear ft). This alternative would also potentially result in impacts on resources within the generally designated GEA and would have the potential to impact wildlife movement. The preferred Pacheco Pass alternative would have somewhat less potential impacts for noise and vibration and would affect a fewer number of 4(f) and 6(f) resources (16 vs. 20–22) than the most promising Altamont Pass alternatives. The differences in the impacts on waterbodies, wetlands, nonwetland waters, species, and cultural resources would vary considerably depending upon the Altamont Pass alternative. The two Altamont Pass alternatives providing direct service to San Francisco would include a new Bay crossing at Dumbarton and would cross areas within the Don Edwards San Francisco Bay National Wildlife Refuge (wetlands and sensitive habitat) and therefore would have considerably higher impacts on waters, wetlands, and 4(f) resources than the Pacheco Pass alternative. In comparison to these Altamont Pass alternatives, the Pacheco Pass alternative would have considerably less potential impacts on waterbodies (3.8 ac vs. 39.6 ac), considerably less potential impacts on wetlands (15.6 ac vs. 44.4–45.9 ac), and fewer potential impacts on nonwetland waters (14,395 linear ft. vs. 15,947–16,773 linear ft), while having relatively similar potential impacts on the number of special status plant species (58 vs. 56), special status wildlife species (53 vs. 49-50), and cultural resources (168 vs. 149-180). In comparing the Altamont Pass alternative to Oakland and San Jose along the east bay, the Pacheco Pass alternative to San Francisco and San Jose would have slightly more potential impacts on waterbodies (3.8 ac vs. 2.3 ac), wetlands (15.6 ac vs. 12.3 ac), and nonwetland waters (14,395 linear ft vs. 14,032 linear ft), special-status plant species (58 vs. 40), special-status wildlife species (53 vs. 44), and cultural resources (168 vs. 128). The Pacheco Pass Alternative would avoid impacts on the Don Edwards San Francisco Bay National Wildlife Refuge, and it would include mitigation measures to reduce or avoid potential impacts on resources within the GEA and in particular along existing Henry Miller Road (see Section 3.15.5). The program-level analysis of impacts to 4(f)/6(f) resources generally supports the selection of the preferred Pacheco Pass (San Francisco and San Jose Termini) network alternative, although all network alternatives have potential to impact 4(f)/6(f) resources.

7.3.4 MTC’s “Regional Rail Plan for the San Francisco Bay Area”

The MTC, BART, Caltrain, and the Authority, along with a coalition of rail passenger and freight operators, prepared a comprehensive “Regional Rail Plan for the San Francisco Bay Area” (Plan) adopted by MTC in September 2007. The Plan establishes a long-range vision to create a Bay Area rail network

that addresses the anticipated growth in transportation demand and meets that demand. This Plan examines ways to incorporate expanded passenger train services into existing rail systems, improve connections to other trains and transit, expand the regional rapid transit network, increase rail capacity, coordinate rail investment around transit-friendly communities and businesses, and identify functional and institutional consolidation opportunities. The plan also includes an analysis of potential high-speed rail routes between the Bay Area and the Central Valley. The Plan is separate from the Authority's 2008 Final Program EIR/EIS but is accounted for in Section 3.17, "Cumulative Impacts," of the 2008 Final Program EIR/EIS. The Plan, which was issued and approved during the Draft Program EIR/EIS comment period, provides useful additional information for consideration as part of the Authority's decision-making process.

As the HST system involves major infrastructure investment, the Plan identifies and evaluates options for providing overlay services (use of the HST infrastructure for regional rail service with additional investments in facilities and compatible rolling stock). Overlay services are considered for each HST Network Alternative. Regional overlay operations on HST lines could provide service to additional local stations along the HST lines. Such local stops typically would be developed as four-track sections with a pair of outside platforms for regional trains and two express tracks (no platforms) in the center. The extent of the four-track sections would depend on the prevailing speed of the line for statewide service as well as the spacing and location of the local stops. The regional overlay services would be operated with compatible equipment, but the average speeds would be lower and the overall travel times would be greater than the HST because of the additional stops. Additional investment would be necessary to provide the infrastructure for such regional overlay services.

The Plan concludes that the Bay Area needs a Regional Rail Network. "As the BART system becomes more of a high-frequency, close stop urban subway system, it needs to be complemented with a larger regional express network serving longer-distance trips" and "High-Speed Rail complements and supports development of regional rail—a statewide high-speed train network would enable the operation of fast, frequent regional services along the high-speed lines and should provide additional and accelerated funding where high-speed and regional lines are present in the same corridor" (MTC, 2007 *Regional Rail Plan*, pg ES-3).

The Plan concludes that "an Altamont alignment would have higher regional ridership (between points located from Merced and north) of 20-million trips in Year 2030 vs. about 16-million trips for a Pacheco alignment—by contrast, a Pacheco alignment would have higher ridership between Northern California and Southern California (between points located from Fresno and south) of 40-million trips in Year 2030 vs. about 34-million trips for an Altamont alignment." In addition, "if either Altamont or Pacheco were selected as the sole option, 4-track sections would be needed at regional stations as well as approaching and departing regional stops. These four-track sections would be required along the Altamont route between Fremont and Tracy and along the Pacheco route between San Jose and Gilroy. By contrast, with an Altamont + Pacheco option, two-track sections would suffice from San Jose to Gilroy and from Fremont to Tracy; additionally, a lower-cost bridge connection at the Dumbarton crossing could be developed thereby reducing the cost of a combination alternative by as much as \$1 billion compared to simply building both of the alignments separately" (MTC, 2007, *Regional Rail Plan*, pg ES-17). The Plan also concludes that, "Regardless of which Altamont or Pacheco options would be developed, an initial phase of investment in the Peninsula alignment between San Jose and San Francisco would help make Caltrain, with an express/limited stop ridership potential of 6.3 million riders per year in 2030 'high speed rail ready'" (MTC 2007, *Regional Rail Plan*, pg. ES-18).

7.3.5 Preferred HST Network Alternative

The Authority identifies as the preferred alternative:

A. PACHECO PASS TO SAN FRANCISCO (VIA SAN JOSE) FOR THE PROPOSED HST SYSTEM (FIGURE 7-1)

The Pacheco Pass alternative serving San Francisco and San Jose termini best meets the purpose and need for the proposed HST system. Key reasons include:

1. The Pacheco Pass minimizes impacts on wetlands, waterbodies, and the environment.

The statewide HST system should provide direct service to Northern California's major hub airport at SFO and major transit, business, and tourism center at downtown San Francisco. The Pacheco Pass alternative serving San Francisco and San Jose termini has the least potential environmental impacts overall while providing direct HST service to downtown San Francisco, SFO, and the San Francisco Peninsula (Caltrain Corridor) and minimizes construction issues which can lead to delay and cost escalation.

The Pacheco Pass enables San Francisco, SFO, and the San Francisco Peninsula to be directly served without a crossing of the San Francisco Bay. Altamont Pass alternatives requiring a San Francisco Bay crossing would have the greatest potential impacts on the San Francisco Bay and have high capital costs and constructability issues. The Dumbarton Crossing would also have the greatest potential impacts on wetlands and the Don Edwards San Francisco Bay National Wildlife Refuge. To implement these alternatives, extensive coordination would be required with the USACE under Section 10 of the Rivers and Harbors Act and the California Coastal Commission, and the Bay crossing would be subject to the USACE, CDFG, and BCDC permit process. A number of agencies, organizations, and individuals have raised concerns regarding to the construction of a HST crossing of the San Francisco Bay. These include the MTC, BCDC, USEPA, USFWS, Congress members Zoe Lofgren, Michael Honda, Anna Eshoo, and Tom Lantos, State Senators Elaine Alquist and Abel Maldonado, and Assembly member Jim Beale as well as Santa Clara County, San Mateo County Transit District (SamTrans), San Mateo County Transportation Authority (TA), Peninsula Corridor (Caltrain) Joint Powers Board (JPB), San Francisco Bay Trail Project, San Jose Chamber of Commerce, the City of San Jose, the City of Oakland, and Don Edwards (Member of Congress, 1963–1995).

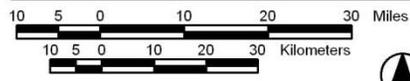
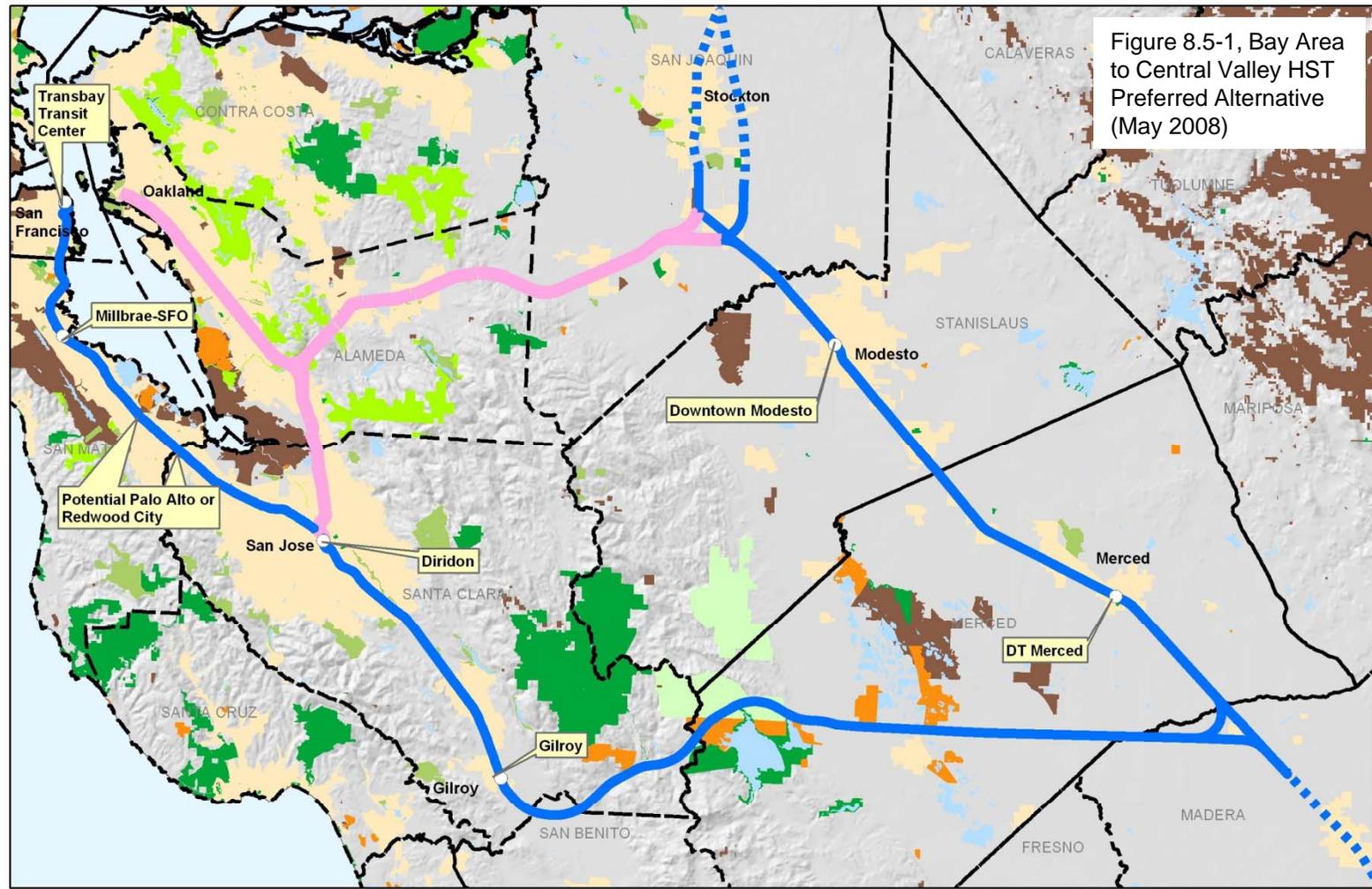
While a considerable number of comments have raised concerns about potential environmental impacts for Pacheco Pass alternatives (in particular relating to potential impacts on the GEA), HST via the Pacheco Pass is feasible and preferred because it would result overall in fewer impacts when compared to the Altamont Pass alternatives with a Bay crossing. Additionally, the Pacheco Pass alternative would include various measures to avoid, minimize, and/or mitigate environmental impacts to the extent feasible and would offer opportunities for environmental improvements along the HST right of way that could be accomplished during project design, construction, and operation, including through use of tunnels and aerial structures where appropriate. This contrasts with the more uncertain regulatory approvals that would be needed for crossings of San Francisco Bay and the Don Edwards San Francisco Bay National Wildlife Refuge. Identification of a preferred alternative in the 2008 Final Program EIR/EIS is required for NEPA compliance. Since the identified preferred alternative would have the least overall environmental impacts, it is also identified as the environmentally superior alternative for CEQA compliance and the environmentally preferable alternative under NEPA.

2. The Pacheco Pass best serves the connection between the Northern and Southern California.

Operational benefits result in greater frequency and capacity:

San Francisco and San Jose would be served with one HST alignment along the Caltrain corridor providing the most frequent service to these destinations, whereas the most promising Altamont Pass alternatives would split HST services (express, suburban express, skip-stop, local, regional) between two branch lines to serve San Jose and either San Francisco or Oakland—reducing the total capacity

Figure 8.5-1, Bay Area to Central Valley HST Preferred Alternative (May 2008)



- Legend**
- HST Preferred Alignments
 - High Speed Commuter Rail/HST Overlay
 - Stations
 - County Lines
 - Waters
 - Urban Areas
 - Publicly Owned Lands**
 - Federal
 - State
 - Regional
 - Local
 - DFG Wildlife Area/Ecological Reserve

California High-Speed Train Program EIR/EIS



Figure 7-1
Bay Area to Central Valley HST Preferred Alternative
 Bay Area to Central Valley HST Revised Draft Program EIR Material

of the system to these markets. The proposed HST system already has two locations where there are branch splits (north of Fresno—to Sacramento and the Bay Area, and south of Los Angeles Union Station—to Orange County and the Inland Empire). Avoiding additional branch splits in the HST alignment would benefit train operations and service.

Provides a superior connection between the South Bay and Southern California:

The Pacheco Pass enables the shortest connection to be constructed between the South Bay and Southern California with the quickest travel times between these markets. A southern Santa Clara County HST station increases connectivity and accessibility for the South Bay and the three county Monterey Bay area.

Fewer stations between the Major Metropolitan Areas:

The core purpose of the HST system is to serve passenger trips between the major metropolitan areas of California. There is a critical tradeoff between the accessibility of the system to potential passengers that is provided by multiple stations and stops, and the resulting HST travel times. Additional or more closely spaced stations (even with limited service) would lengthen travel times, reduce frequency of service, and the ability to operate both express and local services. The Pacheco Pass has the advantage of fewer stops through the high-speed trunk of the system between San Francisco or San Jose and Southern California, the most populated regions of the state.

Between Merced and Gilroy, the high-speed trains will be maintaining speeds well over 200 mph. The fact that there is no significant population concentrations between Merced and Gilroy along the Pacheco Pass is a positive attribute since there are fewer communities and hence fewer community impacts. Additionally there will be no HST station between Gilroy and Merced. As a result, the Pacheco Pass minimizes the potential for sprawl inducement as compared with the Altamont Pass.

Minimizes Logistical Constraints:

The Pacheco Pass avoids construction issues and logistical constraints through the Tri-Valley and Alameda County. The Tri-Valley PAC has raised serious concerns with all the Altamont Pass alternatives regarding land use compatibility and right-of-way constraints and the need for aerial structures through the Tri-Valley. All Altamont Pass alternatives have tunneling/seismic issues (Calaveras Fault) in the Pleasanton Ridge/Niles Canyon area as well as seismic issues in the East Bay (Hayward Fault). Both the City of Fremont and the City of Pleasanton are opposed to HST alternatives through these cities because of potential environmental issues, right-of-way constraints, and other logistical issues. In addition, UPRR's position denying use of its rights-of-way for HST tracks presents a greater implementation challenge for the Altamont Pass network alternatives than for the Pacheco Pass Network Alternative serving San Francisco via San Jose.

3. The Pacheco Pass best utilizes the Caltrain corridor.

The Pacheco Pass alternative would enable the early, incremental implementation of the entire Caltrain Corridor section between San Francisco, San Jose, and Gilroy. The HST system is complementary to Caltrain and would utilize the Caltrain right-of-way and share tracks with express Caltrain commuter rail services. Caltrain intends to use lightweight, electrified trains that would be compatible with HST equipment. Because it utilizes the Caltrain corridor, environmental impacts would be minimized. The Authority's phasing plan identifies the Caltrain Corridor (between San Francisco and San Jose) as allowing the Authority to maximize the use of local and regional funds dedicated to train service improvements, and thereby helping to reduce the need for state funds.

4. The Pacheco Pass is still strongly supported by the Bay Area region, ~~cities, agencies, and organizations.~~

Many of the Bay Area local and regional governments, transportation agencies, and business organizations strongly support the Pacheco Pass alternative to San Francisco via San Jose and the

Caltrain Corridor. As described in Section 7.3-2, although there is considerable city and community concern for implementation of HST along the San Francisco Peninsula overall. However, there is strong local and regional government support for the recommended Pacheco Pass alternative from the cities of San Francisco and San Jose, and the Metropolitan Transportation Commission, the regional transportation planning agency for the San Francisco Bay Area, along this Pacheco Pass alignment throughout the Bay Area. This support is critical towards implementing this major infrastructure project through the heavily urbanized Bay Area linking San Francisco, San Jose and Gilroy.

~~The Central Valley (including Sacramento) and many transportation and environmental organizations are united in strongly preferring the Altamont Pass. However, to reach the major markets in the Bay Area, the Altamont Pass alternatives must go through Alameda County, including Livermore and Pleasanton in the Tri-Valley and Fremont. The Tri-Valley PAC (a partnership that includes the cities of Dublin, Livermore, Pleasanton, Danville, San Ramon, and Tracy along with transportation providers LAVTA, ACE, and BART) has raised serious concerns regarding right-of-way constraints and the need for aerial structures through the Tri-Valley. The Tri-Valley PAC supports HST service through the Pacheco Pass and “regional overlay service provided through the Altamont pass.” They believe that this option may present the best way of addressing their concerns and delivering optimal HST service to the region as a whole. The Alameda County Congestion Management Agency and Alameda County Supervisor Scott Haggerty both support the MTC recommendation for the Pacheco alignment via the San Francisco Peninsula as the main HST express line between Northern and Southern California while also supporting upgraded interregional services between the Bay Area—Sacramento and the San Joaquin Valley via the Altamont Pass. The City of Fremont opposes the Altamont Pass alternative as does the City of Pleasanton although Pleasanton remains “open” to terminating Altamont alternatives in Livermore. The concerns through Alameda County are significant enough that the MTC, Alameda County Congestion Management Agency, and Alameda County Supervisor Scott Haggerty have requested that “the CHSRA also evaluate an alternative in the Altamont Corridor that terminates HSR at a proposed BART Livermore station”—even with the main HST express line using the Pacheco Pass.~~

5. The Pacheco Pass has the fewest impacts to communities because it makes the best use of available rail and transportation rights of way.

The Pacheco Pass Network Alternative serving San Francisco via San Jose is least disruptive to communities because it is designed to use existing, publicly owned rail and highway right-of-way as a method of minimizing environmental and community impacts. The publicly owned rail right-of-way between San Francisco and San Jose provides a very unique opportunity to reach both San Francisco and San Francisco International Airport without having to construct an entirely new or largely new rail right-of-way for the HST. The Peninsula Corridor Joint Powers Board is a willing partner with the Authority and strongly supports incorporation of HST service along with Caltrain and UPRR freight in this corridor. The presence of the Monterey Highway right-of-way between San Jose and Gilroy also provides a very unique opportunity to minimize impacts to communities because it allows for HST tracks to be built largely within existing publicly owned right-of-way, thereby minimizing the need for acquiring property and constructing an entirely new or largely new rail right-of-way for the HST. The City of San Jose is a willing partner with the Authority and strongly supports the narrowing of the underutilized Monterey Highway in order to accommodate HST service in this corridor.

7.3.6 Preferred HST Alignment Alternatives and Station Location Options for the Preferred Pacheco Pass Network Alternative

A. SAN FRANCISCO TO SAN JOSE

Preferred Alignment Alternative

Caltrain Corridor (Shared Use)

Analysis

The Draft Program EIR/EIS analyzed one alignment alternative between San Francisco and San Jose along the San Francisco Peninsula that would utilize the Caltrain rail right-of-way and share tracks with express Caltrain commuter rail services. The Caltrain Corridor (Shared Use) is the preferred alignment alternative for direct service to San Francisco and San Francisco International Airport (SFO).

The alignment between San Francisco and San Jose is assumed to have 4 tracks, with the two middle tracks being shared by Caltrain and HST and the outer tracks used by Caltrain. The HST could operate at maximum speeds of 100–125 mph along the Peninsula providing 30-minute express travel times between San Francisco and San Jose. Environmental impacts would be minimized since this alignment utilizes the existing Caltrain right-of-way. This alignment alternative would increase connectivity and accessibility to San Francisco, the Peninsula, and SFO, the hub international airport for northern California. The HST system would provide a safer, more reliable, energy efficient intercity mode along the San Francisco Peninsula while improving the safety, reliability, and performance of the regional commuter service because of the fully grade separated tracks with fencing to prevent intrusion, additional tracks, and a state-of-the-art signaling and communications system. The HST alignment would greatly increase the capacity for intercity and commuter travel and reduce automobile traffic.

Many comments in favor of the proposed HST on the San Francisco Peninsula were received from agencies and the public, including MTC, the City of San Francisco, Caltrain JPB, SamTrans, the Transbay Transit Center JPB, the City of Santa Clara, the County of Santa Clara, the City of Morgan Hill, and the San Francisco Chamber of Commerce. There is also considerable opposition to improvements on the Caltrain corridor raised by some members of the public. The City of Menlo Park supported investigating options to avoid the San Francisco Peninsula area by substituting existing transit systems for the HST, and the Town of Atherton supports options that would avoid HST service through the Town of Atherton as well as investigating trench concepts through the Town of Atherton at the project level. The Cities of Menlo Park and Millbrae have raised concerns regarding potential impacts through their cities. The "Peninsula Cities Consortium" (which includes Palo Alto, Menlo Park, Atherton, Belmont, and Burlingame) was created after the November 2008 election as a result of concerns regarding potential impacts along the Caltrain Corridor including: alignment, environmental consequences, local growth, station planning and land use as well as noise and vibration, biological and cultural resources.

Preferred Station Location Options

Downtown San Francisco Terminus: Transbay Transit Center

Analysis

The Transbay Transit Center site is the preferred station location option for the San Francisco HST Terminal. The Transbay Transit Center would offer greater connectivity to San Francisco and the Bay Area than the 4th and King site (about a mile from the financial district) because of its location in the heart of downtown San Francisco and since it would serve as the regional transit hub for San Francisco. The Transbay Transit Center is located in the financial district where many potential HST passengers could walk to the station. The Transbay Transit Center is also expected to emerge as the transit hub for all major services to downtown San Francisco, with the advantage of direct connections to BART (1 block from the terminus), Muni, and regional bus transit (SamTrans, AC Transit, and Golden Gate Transit). Moreover, the Transbay Transit Center is compatible with existing

and planned development and is the focal point of the Transbay redevelopment plan that includes extensive high-density residential, office, and commercial/retail development. Sensitivity analysis on the Pacheco Pass “Base” forecasts (low-end forecasts) concluded that the Transbay Transit Center would attract about 1 million more annual passengers a year by 2030 than the 4th and King station location option.

The capital costs needed for the HST component of the Transbay Transit Center is estimated to be similar to the estimated costs for the 4th and King option. The 1.5 mile extension that would be required to get to the Transbay Transit Center station from the 4th and King station results in approximately \$400 million in additional costs for the Transbay Transit Center station alternative². Since the rail component would be shared with Caltrain services, the Transbay Joint Powers Authority funding plan assigns only a portion of the rail related Transbay Transit costs to the HST system. The rail facilities planned for the Transbay Transit Center are limited to 6 tracks and 3 platforms; however, Caltrain is planning to continue using the existing 4th and King terminal. The Authority’s program-level operational analysis for the 2008 Final Program EIR indicated that to serve all of the HST trains proposed in the Authority’s operational plan, four tracks and two island platforms would have to be dedicated to HST service. Further cooperative operations planning analysis of Transbay terminal rail capacity is needed to determine the most efficient mix and scheduling of both HST and Caltrain commuter services. For any HST services that are determined not to be accommodated at the Transbay Transit Center facility, the Authority would consider terminating trains at other stations.

Public and agency comments have largely favored the Transbay Transit Center site. The City of San Francisco, the Transbay Terminal JPB, San Mateo County Transit District (SamTrans), the Peninsula Corridor (Caltrain) Joint Powers Board (JPB), San Mateo County Transportation Authority (TA), the San Francisco Chamber of Commerce, and AC Transit all submitted comments in favor of the Transbay Terminal site.

San Francisco Airport Connector Station: Millbrae (SFO)

Analysis

SFO serves as the “hub” airport for international travel in Northern California and is located about 12 miles south of downtown San Francisco. The conceptual design is to link to SFO at the Millbrae Caltrain/BART station location option which is adjacent to SFO (but not directly at the airport). This multi-modal station would link to the airport by the existing BART connection and could possibly be reached in the future by the airport people mover system. The Millbrae (SFO) HST station supports the objectives of the HST project by providing an interface with the northern California hub airport for national and international flights. The Millbrae (SFO) is the preferred HST airport connector station on the San Francisco peninsula.

Mid-Peninsula Station: Continue to investigate both potential sites and working with local agencies and the Caltrain JPB determine whether a Mid-Peninsula station site should be recommended.

Analysis

The Palo Alto and Redwood City station location options would both be multi-modal stations, with similar costs, construction issues, right-of-way issues, and potential environmental impacts. The Redwood City station would have slightly more riders (0.06 million by 2030), but the Palo Alto station would have greater connectivity. The City of Redwood City and the Redwood City Chamber of Commerce support the Redwood City station location option. Future project-level studies should continue to investigate both potential sites and working with local agencies and the Caltrain JPB determine whether a Mid-Peninsula station site should be recommended.

² The cost of the extension is estimated at a program level in 2006 dollars, consistent with cost calculations in the Final Program EIR. The cost is estimated for a two-track tunnel for HST only.

B. SAN JOSE TO CENTRAL VALLEY: PACHECO PASS

Preferred Alignment Alternative

Pacheco Pass via Henry Miller Road (UPRR Connection). At the project-level, however, the Authority will continue to seek and evaluate alignment alternatives (both to the north and south of Henry Miller Road) utilizing the Pacheco Pass that would minimize or avoid impacts to resources in the GEA. The 2008 Final Program EIR/EIS has no Los Banos Station and the Authority has reiterated and expanded its commitment that there will be no station between Gilroy and Merced.

Analysis

The Pacheco Pass via Henry Miller (UPRR Connection) alignment alternative would provide slightly higher ridership potential, provide the fastest travel times and the most direct link between the Bay Area and Southern California (3-4 minutes faster), have slightly less capital costs, and would generally parallel Henry Miller Road, an existing roadway corridor through the environmentally sensitive areas in the Central Valley (resulting in fewer potential severance impacts), while having similar potential environmental impacts as the other Pacheco Pass alignment alternatives evaluated.

The GEA North alignment alternative is estimated to have higher potential visual impacts (medium vs. low), severance impacts, and cultural impacts than either Henry Miller alignment alternative. Potential impacts on farmlands, streams, lakes/waterbodies, and 4(f) and 6(f) resources are estimated to be about the same for each alignment alternative. The GEA North alignment alternative is estimated to have higher potential impacts on wetlands (17.96 ac vs. 11.61 ac), but less potential impacts on non-wetland waters (6,771 linear ft vs. 10,588 linear ft.) when compared to the Henry Miller (UPRR Connection) alignment alternative. Both alignment alternatives would have the potential to impact special-status plant and wildlife species. While both alignment alternatives would likely result in impacts on the GEA, the GEA North alignment alternative would have greater impacts on publicly owned lands and be more disruptive to wildlife movement patterns than the Henry Miller Road alignment alternative. The GEA North alignment alternative would be on a new alignment and bisect the GEA and result in a new barrier to wildlife movement. The Henry Miller alignment alternative would be elevated through large portions of the GEA parallel to an existing roadway that, along with a nearby canal, already bisects the GEA and disrupts wildlife movement. The Henry Miller alignment alternative would provide greater opportunities for mitigation and environmental improvements for wildlife.

The Authority has received a considerable amount of input regarding each of the three alignment alternatives investigated for the "San Jose to Central Valley" corridor. Most of these comments are in regard to concerns over potential impacts on the GEA including comments from the Grassland Water District, Grassland Resources Conservation District, Grassland Conservation, Education & Legal Defense Fund, USFWS, CDFG, and Ducks Unlimited.

As noted above, the comments from these agencies and organizations concerned potential impacts on special status species and biological resources including the San Joaquin kit fox, waterfowl, amphibians, and plants; vernal pools; and wetlands that may be affected by the Pacheco Pass via Henry Miller Road (UPRR Connection) either through or near the GEA, in the San Luis National Wildlife Refuge Complex, on state or federal-owned lands, and on other conservation areas, such as private lands subject to conservation easements. The biological analysis for this EIR/EIS was conducted at a program level and identifies the need for field reconnaissance-level surveys to be conducted in the future at the project level. These future surveys will determine specific habitat conditions and impacts along alignment alternatives and surrounding areas and will identify specifically where impacts on special-status species could occur, leading eventually to focused species surveys. The Pacheco section of the HST system will be further designed at the project-level to avoid or minimize potential impacts. Broad program mitigation measures have been identified and will be further refined at the project level that will mitigate most of the impacts identified by these agencies

and organizations. The Authority and FRA will continue coordination with all agencies and organizations involved to identify specific issues and develop solutions that avoid, minimize, and mitigate potential biological impacts.

Concerns have been raised by the Grasslands Water District, the Sierra Club, and others regarding potential impacts on the GEA by a potential HST station to serve Los Banos and/or a maintenance facility in the vicinity Los Banos along the Henry Miller Road alignment alternative. Between Merced and Gilroy, the high-speed trains will be maintaining speeds well over 200 mph. As previously noted, the fact that there is no population between Merced and Gilroy along the Pacheco Pass is a positive attribute for HST operations since there are fewer communities and hence fewer community impacts. The Authority's certified Statewide Program EIR/EIS states, "The Authority has determined that the Pacheco Pass alignment HST station at Los Banos (Western Merced County) should not be pursued in subsequent environmental reviews because of low intercity ridership projections for this site, limited connectivity and accessibility, and potential impacts to water resources and threatened and endangered species. Although the City of Los Banos supports the Pacheco Pass alignment with a potential station at Los Banos, considerable public and agency opposition has been expressed about a potential Los Banos station because of its perceived potential to result in growth related impacts" (Page 6A-9). The 2008_Final Program EIR/EIS has no Los Banos Station, and the Authority has reiterated and expanded its commitment that there will be no station between Gilroy and Merced. In addition, there are no maintenance and storage facilities considered in the Los Banos area (or in the vicinity of the GEA) as part of the 2008 Final Program EIR/EIS, and the Merced (Castle AFB) site has been identified as the preferred location within the study area for a maintenance facility (see Section 7.3.7).

From a biological perspective, the Pacheco Pass via Henry Miller Road (UPRR Connection) is the recommended preferred alignment alternative because the measures that would be necessary to avoid, minimize, and/or mitigate biological impacts could be accomplished during project design, construction, and operation, and this alignment alternative offers greater opportunities for environmental improvement.

Preferred Station Location Options

Downtown San Jose Terminus: Diridon Station

Analysis

Diridon Station is the preferred HST station location option for downtown San Jose and the Southern Bay Area, serving Caltrain, ACE Commuter Rail, the Capitol Corridor, Amtrak long distance services, VTA buses and light rail, and a possible future link to BART (from Fremont). Diridon Station is a multi-modal hub that maximizes connectivity to downtown San Jose, San Jose International Airport (Diridon Station is just over 3 miles from San Jose International Airport and the City of San Jose expects there will be a direct local rail line connecting these to two major transportation hubs), and the southern Bay Area, and would have high ridership potential. The Authority identifies the Diridon Station as the preferred HST station location option for San Jose and the southern Bay Area. Diridon Station is favored by the City of San Jose and the Valley Transportation Authority (VTA).

Southern Santa Clara County: Gilroy Station (Caltrain)

Analysis

Gilroy (Caltrain) Station is the preferred HST station location option to serve Southern Santa Clara County and the Monterey Bay Area. This station location option would provide the highest accessibility and connectivity for these regions and would have the highest ridership potential.

C. CENTRAL VALLEY

Preferred Alignment Alternative

UPRR N/S Alignment Alternative. However, at the project-level, the Authority would continue to evaluate the BNSF alignment alternative because of the uncertainty of negotiating with the UPRR for use of some of their right-of-way, and would continue investigation of alignments/linkages to a potential maintenance facility at Castle AFB.

Analysis

The alignment alternatives considered for the "Central Valley Alignment" generally followed the two existing freight corridors of the UPRR and the BNSF. With that in mind, HST impacts throughout the Central Valley that have already been reduced and avoided could be further avoided and minimized by sharing the existing freight railroad right-of-way. If a decision were made to proceed with the HST system, the Authority would seek agreements with freight operators to utilize portions of the existing rail right-of-way to the greatest feasible extent.

The UPRR alignment alternative would have high potential ridership for both the Pacheco Pass and Altamont Pass corridors and would serve potential downtown station sites at Modesto and Merced. This alignment alternative would provide the highest connectivity and accessibility for this part of the Central Valley and would best meet the Authority's adopted transit-oriented development criteria for station location options by serving the downtowns of these Central Valley cities. However, the UPRR has expressed opposition to the use of its right-of-way.

The UPRR alignment alternative would have somewhat higher potential noise and visual impacts and more potential impacts on cultural resources (67 vs. 17-28) since it goes through more urban areas, but would have somewhat fewer potential impacts on farmlands (535 ac vs. 776-838 ac), lakes/waterbodies (0.0 ac vs. 1.5-1.6 ac), wetlands (3.04 ac vs. 3.11-3.76 ac) and non-wetland waters (7,161 linear ft vs. 9,094–10,528 linear ft), and floodplains (124.4 ac vs. 158.2-191.1 ac) than the BNSF alignment alternatives.

Preferred Station Location Options

Modesto: Downtown Modesto

Analysis

The Downtown Modesto Station is the preferred HST station location option for Modesto since it maximizes connectivity and accessibility to downtown Modesto and would best meet the Authority's adopted transit-oriented development criteria for station location options by serving the downtown of this Central Valley city. This option is expected to have slightly higher ridership potential and is more compatible with surrounding land uses than the Amtrak Briggsmore site with similar costs and environmental impacts. The Downtown Modesto Station is favored by the City of Modesto and the San Joaquin County Council of Governments. The Amtrak Briggsmore site would need to continue to be investigated as a part of future project-level analysis since it would be the station site to serve the Modesto area for the BNSF alignment alternative.

Merced: Downtown Merced

Analysis

The Downtown Merced Station is the preferred HST station location option for the Merced area since it maximizes connectivity and accessibility to downtown Merced and would best meet the Authority's adopted transit-oriented development criteria for station location options by serving the downtown of this Central Valley city. This option is expected to have less potential impacts on farmlands (0 ac vs. 12 ac) and is more compatible with surrounding land uses than the Castle AFB site with similar costs, ridership, and environmental impacts. The Castle AFB site would need to continue to be investigated as a part of future project-level analysis since it could be the station site to serve the Merced area for

the BNSF alignment alternative. The Castle AFB is recommended as the preferred site for the maintenance facility within the study region.

D. MAINTENANCE FACILITIES

Preferred Location within study area

Merced Area (Castle AFB)

Analysis

The preferred maintenance and storage facility location to support the HST fleet in the study region is the Merced area (Castle AFB). The number of maintenance facilities needed for the statewide system, their locations, and sites will be further defined at the project level. Two locations were considered for "Fleet Storage/Service and Inspection/Light Maintenance" within the study region: (1) West Oakland; and (2) Merced (near or at Castle AFB). There is strong support in the Merced region (Merced County, U.C. Merced, Congressman Cardoza, Merced County HSR Committee, and the Merced County Association of Relaters) for the maintenance facility. The West Oakland site would not serve the preferred Pacheco Pass alternative but should be considered as a part of future Regional Rail/HST project via the Altamont corridor. Program-level evaluation considered only a site in the Bay Area at West Oakland as representative of system maintenance needs in the Bay Area. Possible Bay Area locations and sites for fleet storage/service and inspection/light maintenance facility along the preferred HST alternative between Gilroy and San Francisco will be considered as part of project-level engineering and environmental review.

E. SAN FRANCISCO BAY CROSSINGS

Preferred Alignment alternative

No Bay Crossing for the Proposed HST System

Analysis

The preferred alternative has no San Francisco Bay crossing. The Trans Bay Crossing between Oakland and San Francisco is estimated to result in potential direct impacts on 20.07–22.1 acres of Bay Waters and indirect impacts on 228–235.5 acres of waterbodies. The cost associated with this approximately 7-mile crossing is estimated at over \$5 billion in 2006 dollars (over \$700 million per mile) with a ridership increase of up to about 2%. To implement this alignment alternative, extensive coordination would be required with the USACE under Section 10 of the Rivers and Harbors Act and the California Coastal Commission and crossing the Bay would be subject to the USACE, CDFG, and BCDC permit process.

The Dumbarton Crossing would result in potential direct impacts on 33.9–55.4 acres of wetlands (predominately through the Don Edwards San Francisco Bay National Wildlife Refuge) and direct impacts of 2,361–3117 linear feet of Bay waters. All of the Dumbarton alignment alternatives are estimated to have high noise impacts where the alignment is predominately on aerial structure through Fremont, and the bridge alignment alternatives (high bridge and low bridge) would have high potential noise and vibration impacts throughout the alignment. The cost associated with this approximately 19–21.7-mile crossing is estimated at \$1.5 billion (low bridge) to over \$3 billion in 2006 dollars (tube). With the low-bridge alternative, HST service would be interrupted by water traffic, adversely impacting the reliability and service quality of the HST system. Constructing a new bridge or tube crossing along the Dumbarton corridor would involve major construction activities in sensitive wetlands, saltwater marshes, and aquatic habitat, requiring special construction methods and mitigations. All the alignment alternatives would result in direct impacts on Don Edwards San Francisco Bay National Wildlife Refuge and would have potential direct impacts on 15 special-status plant and 21 special-status wildlife species. To implement this alignment alternative across the bay, extensive coordination would be required with the USACE under Section 10 of the Rivers and Harbors Act and the California Coastal Commission and the Bay crossing would be subject to the USACE, CDFG, and BCDC permit process. BCDC scoping comments note that bridge alignment alternatives that could have adverse impacts on Bay resources can only be approved by BCDC "if there is not an

alternative upland location for the route and if the fill in the minimum necessary to achieve the purposes of the project" (BCDC scoping response, December 15, 2005). The Authority has received comments signed by 5 members of Congress and 4 members of the California Legislature stating that any alignment alternative requiring construction through the Don Edwards San Francisco Bay National Wildlife Refuge with additional impacts on the San Francisco Bay and Palo Alto shore of the Bay should be rejected. The City of Fremont opposes the Dumbarton Crossing alignment alternatives because of the potential impacts on Fremont neighborhoods.

The MTC supports a new Transbay Tube between San Francisco and Oakland (via the San Francisco Peninsula) and the Town of Atherton supports a new Transbay Tube between Oakland and San Francisco (via the East Bay).

7.3.7 Altamont Corridor Rail Project

The Altamont Pass provides superior travel times between Sacramento/Northern San Joaquin Valley and the Bay Area and is strongly supported by the Central Valley. Many of the comments received in support of the Altamont Pass are related to its great potential for serving long-distance commuters between the Central Valley and the Bay Area. As indicated by the comments received by the Tri-Valley PAC, many of the negative impacts associated with construction of HST through the Tri-Valley might be considerably reduced by the elimination of the additional tracks needed for HST express services.

The Authority is working in partnership with "local and regional agencies and transit providers" to develop a joint-use (Regional Rail and HST) infrastructure project in the Altamont Pass corridor—as advocated in MTC's recently approved "Regional Rail Plan for the San Francisco Bay Area." Regionally provided commuter overlay services would require regional investment for additional infrastructure needs and potentially need operational subsidies. The Authority cannot unilaterally plan for regionally operated commuter services.

"Regional Rail" in the Altamont Pass corridor is being pursued by the partnership as an independent project to satisfy a different purpose and need³ from the proposed HST system, but that could also accommodate HST service. The Authority is the lead state agency and the Federal Railroad is the lead federal agency for the project EIR/EIS process, which was initiated on October 22, 2009. The Authority is working in partnership with other agencies to secure local, state, federal, and private funding to develop this joint-use infrastructure project in the Altamont corridor. This corridor was added as part of the Proposition 1A HST funding package.

The Authority is pursuing potential joint-use Altamont Corridor Regional Rail/HST services and identifying alternatives for further evaluation, including direct service to San Jose or potentially terminating HST service at Livermore (connecting to an extended and enhanced BART system). The Authority's objective is that the infrastructure would be electrified, fully grade-separated, and compatible with and shared by HST services. Providing connectivity and accessibility to Oakland and Oakland International Airport would be a crucial objective for this project.

At this time, no proposed alignments have been identified for the Altamont Corridor Rail Project; however, the corridor limits are between Stockton and San Jose, which are the terminal stations for the current ACE service. Specific alignments and station locations will be identified along this corridor and evaluated through the preparation of the project environmental document. The Altamont Corridor Rail Project is intended to include a potential branch east of Tracy to allow operation of trains between the Bay Area and points north including Stockton and Sacramento as well as points south including Modesto and beyond within the Statewide HST System. Project alternatives are intended to provide intermodal connections to the Bay Area Rapid Transit (BART) to serve the Oakland Airport, the cities of Oakland and

³ As defined in CEQA and NEPA implementing regulations, procedures, and guidelines.

San Francisco as well as other East Bay and South Bay locations via BART. Intermodal connections to BART would be provided in the Livermore vicinity, should the Dublin/Pleasanton BART line be extended, as well as in the Fremont/Union City vicinity, either meeting the existing Fremont line or the Warm Springs/San Jose extension. The Altamont Corridor Rail Project may also accommodate a future connection to the Dumbarton rail service in the Fremont/Union City vicinity as well as an intermodal connection to the Valley Transportation Authority (VTA) light rail network in Santa Clara County. Additionally, the project will accommodate feeder and connecting bus services providing access to proximate market areas and interfacing with regional bus links where appropriate.

To lay the groundwork for the Altamont Corridor Rail Project, the Authority will work with ACE, SJRRC, San Joaquin County Council of Governments, the Tri-Valley Pac, Alameda County, Santa Clara County, and others to get the Altamont Regional Rail/HST project identified in the update to the 2035 Regional Transportation Plan (RTP) and funds programmed in the 2035 RTP and RTIP. Since July 2008, the Authority has been leading the "Altamont Working Group" that includes MTC and agencies and transit providers along the Altamont corridor project study that addresses the Altamont Pass, the East Bay connections, and stations in partnership, and provides the information necessary for the Authority to undertake an environmental study for this project.

**CHAPTER 8
UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS: SAN JOSE
TO GILROY**

8 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS: SAN JOSE TO GILROY

The following text (Table 8-1) for traffic, land use, and cultural resources replaces that contained in Chapter 9 of the 2008 Final Program EIR in Table 9.3-1 on page 9-10 to reflect the revised HST network and alignment alternatives analysis resulting from changes to the San Jose to Gilroy portion of the Pacheco Pass alignment alternative. There are no changes to the text from the Revised Draft Program EIR. .

Table 8-1
Revised Table 9.3-1—Summary of Key Environmental Impact/Benefits of Alternatives

Key Environmental Issues	Alternative		Mitigation Strategy for HST	Potential Significance for HST	
	No Project	HST Network Alternatives		Before Mitigation	After Mitigation
Traffic and Circulation	Capacity is insufficient to accommodate projected growth. 13 of the 18 intercity highway segments considered would operate at unacceptable levels of service with increased congestion, travel delays, and accidents compared to existing conditions. Congestion would increase.	Congestion reduction on intercity highways compared to the No Project Alternative. 15 of the 18 intercity highway segments would experience diversion of trips from vehicles to the HST system yielding improved V/C ratios. Reduce automobile travel in the state 61 billion miles annually. Localized traffic conditions around some stations would be adversely affected. Level of service for three northbound segments of a reduced-width Monterey Highway between Senter and Blossom Hill would be adversely affected.	Encourage use of transit to stations. Work with transit providers to improve station connections. Signal timing and synchronization, turn lanes, and transit use for impacts on Monterey Highway.	Potentially significant	Potentially less than significant/ potentially significant/ unavoidable
Land Use (compatibility and property impacts)	Expansion of urban sprawl as population grows and congestion increases; development on open space and agricultural lands.	Controlled growth around stations, urban in-fill; compatible with transit-first policies. Majority of property acquisition along existing rights-of-way, some acquisition along new rights-of-way in undeveloped areas. Impacts to adjoining land uses (residential and industrial) at select locations prior to mitigation. Environmental Justice impacts at select locations along alignments	Continued coordination with local agencies. Explore opportunities for joint and mixed-use development at stations. Relocation assistance during future project-level review. Overall mitigation strategies for affected land uses and in EJ areas.	Potentially significant	Potentially less than significant

Key Environmental Issues	Alternative		Mitigation Strategy for HST	Potential Significance for HST	
	No Project	HST Network Alternatives		Before Mitigation	After Mitigation
		and stations prior to mitigation.			
Visual Quality	No predictable change to existing landscape.	Low to high visual contrasts for elevated structures; low to high sensitivity in scenic open space and mountain crossings.	Design strategies to minimize bulk and shading of bridges and elevated guideways. Use neutral colors and materials to blend with surrounding landscape features.	Potentially significant	Potentially less than significant/ potentially significant/ unavoidable
Cultural Resources (including Section 4(f) historical resources) (includes area within 500 ft on each side of alignment centerline for new routes, 100 ft from centerline along existing transportation facilities, and 500 ft around station locations)	Low ranking for impacts on archaeological resources and historic property.	79 to 223 known archaeological and cultural resources within Area of Potential Effect. Low to high ranking for potential impacts on archaeological resources and historic properties (HST would use existing rail corridors and some stations and nearby resources developed in historic period). (Range based on HST Network Alternatives. See Chapter 7)	Develop procedures for fieldwork, identification, evaluation, and determination of effects for cultural resources in consultation with State Historic Preservation Office and Native American Tribes.	Potentially significant	Potentially significant/ unavoidable

CHAPTER 9
LIST OF PREPARERS

9 LIST OF PREPARERS

9.1 California High-Speed Rail Authority

Dan Leavitt, Deputy Director

Carrie Pourvahidi, Deputy Director

9.2 List of Consultants

Name	Title	Responsibility
Dave Mansen	Vice President, Parsons	Project Manager, Revised Program EIR Material, Project Description, Land Use, Traffic, UPRR
Dave Wemmer	Infrastructure Design Manager, Parsons	Project Description, Engineering, Traffic, UPRR, Costs
Karla Nicholas	Environmental Planning Manager, Parsons	Land Use
Craig Richey	Assistant Planner, Parsons	Land Use
Steve Moran	Graphics, Parsons	Cross Sections
Indu Sreedevi	Senior Transportation Systems Analyst, Parsons	Traffic
Michael Kiesling	Principal, Architecture 21	Project Description, Land Use, UPRR, Monterey Highway Background, Visual
Gary Kennerley	San Jose to Merced Regional Manager, PB Americas, Inc.	Project Description, UPRR
Dominic Spaethling	San Francisco to San Jose Regional Manager, PB Americas, Inc.	Project Description, UPRR, Costs
David Freytag	Sr. Vice President, ICF	Revised Program EIR Material, Cultural Resources, Costs, Unavoidable Adverse Impacts
Richard Starzak	Technical Director, ICF	Cultural Resources
Troy Rahmig	Senior Consultant, ICF	Biology, Cultural Resources
Kristen Hageseth	Environmental Research Technician, ICF	Ecology, Cultural Resources
Heather White	Environmental Research Technician, ICF	Biology, Cultural Resources
Paul Weller	Senior Landscape Architect, ICF	Arborist, Cultural Resources
Ellen Unsworth	Managing Editor, ICF	Editorial Lead
Corrine Ortega	Publication Specialist, ICF	Document Publication

CHAPTER 10
SOURCES USED IN DOCUMENT PREPARATION

10 SOURCES USED IN DOCUMENT PREPARATION

This chapter lists the primary sources used in the preparation Volume 1 of this document. Primary sources used in the preparation of the Response to Comments in Volume 2 are located at the end of Volume 2. The primary sources include printed material, Web-based material, and personal communications.

Cited throughout this document:

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10.2.1 Printed References

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10.2.2 Personal Communication

Parsons. 2010a. Internal memo from David Freytag, ICF International, to Dave Mansen, Parsons. February 23, 2010. Subject: Review of 2008 Final Program EIR.

Parsons. 2010b. Internal memo from Michael Kiesling, Architecture 21, to Dave Mansen, Parsons. March 3, 2010. Subject: Methods and Resources for Revised Draft Program EIR Material (Land Use, Visual, and HST-UPRR Interaction).

10.3 Chapter 3

10.3.1 Printed References

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10.3.2 Personal Communication

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Union Pacific Railroad. 2008b. Letter regarding: Final Bay Area to Central Valley HST Program EIR/EIS. Sent by Scott Moore to Quentin L. Kopp, California High-Speed Rail Authority Board, dated July 7, 2008.

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10.4 Chapter 4

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10.6 Chapter 6

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10.7 Chapter 7

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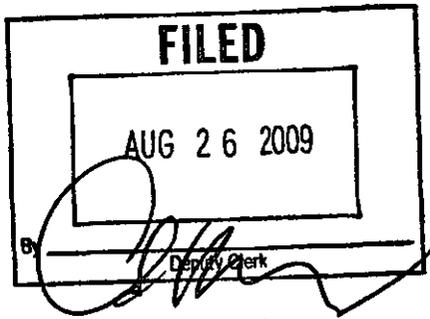
10.8 Chapter 8

No references

APPENDIX A

AUGUST 26, 2009 COURT RULING

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SUPERIOR COURT OF CALIFORNIA
COUNTY OF SACRAMENTO

TOWN OF ATHERTON, a Municipal Corporation,
PLANNING AND CONSERVATION LEAGUE, a California nonprofit corporation,
CITY OF MENLO PARK, a Municipal Corporation,
TRANSPORTATION SOLUTIONS DEFENSE AND EDUCATION FUND, a California nonprofit corporation,
CALIFORNIA RAIL FOUNDATION, a California nonprofit corporation,
and BAYRAIL ALLIANCE, a California nonprofit corporation, and other similarly situated entities,

Case No.
34-2008- 80000022

RULING ON SUBMITTED MATTER

Petitioners and Plaintiffs,
v.

CALIFORNIA HIGH SPEED RAIL AUTHORITY, a public entity, and DOES 1-20, inclusive,

Respondents and Defendants.

_____ /

This matter came on for hearing on May 29, 2009. The matter was argued and submitted. The Court took the matter under submission. The Court, having considered the papers, the administrative record which was admitted into evidence

1 at the hearing, and the arguments of the parties, makes its
2 ruling as follows.

3 Petitioners challenge the decision of respondent and
4 defendant California High Speed Rail Authority ("CHSRA" or
5 "the Authority") to approve the Bay Area to Central Valley
6 High Speed Train Project ("the Project"), including
7 specifically choosing an alignment for the Project.
8 Respondent chose an alignment running through Pacheco Pass
9 rather than the other major alternative alignment which ran
10 through Altamont Pass.

11 Petitioners contend that respondent has not provided
12 legally adequate review under the California Environmental
13 Quality Act, Public Resources Code section 21000 et seq.
14 ("CEQA"). Petitioners contend that respondent's actions are
15 illegal as they violate CEQA and the California Code of
16 Regulations, Title 14, section 15000 et seq. ("CEQA
17 Guidelines").

18 Petitioners contend that the Final Program
19 Environmental Impact Report ("FPEIR") for the Project was
20 inadequate in several respects. They contend that it failed
21 to include an adequate description of the project and
22 feasible alternatives. They contend it failed to adequately
23 identify and mitigate the Project's significant impacts, and
24 that its alternatives analysis was inadequate and improperly
25 predisposed towards the Pacheco alignment. Petitioners also
26 contend that respondent Authority improperly refused to
27 recirculate the Draft Program Environmental Impact Report
28 ("DPEIR") after Union Pacific Railroad announced it was
unwilling to allow use of its right-of-way, and that

1 respondent Authority failed to consider or respond to Menlo
2 Park's comment letter on the DPEIR.

3
4 I. STANDARD OF REVIEW

5 Petitioners contend that this challenge is governed by
6 Public Resources Code section 21168. Petitioners contend
7 that under that standard of review, "the courts' inquiry
8 shall extend only to whether there was a prejudicial abuse
9 of discretion. Such an abuse is established if the agency
10 has not proceeded in a manner required by law or if the
11 determination or decision is not supported by substantial
12 evidence." (Petitioners' opening brief, 8:24-9:2, citing
13 *Ebbets Pass Forest Watch v. California Dept. of Forestry &*
14 *Fire Protection* (2008) 43 Cal.4th 936, 944.)

15 Respondent contends that its action was quasi-
16 legislative and that review is governed by Public Resources
17 Code section 21168.5, which limits the Court's inquiry to
18 whether there was a prejudicial abuse of discretion.
19 Respondent states that under this standard, a prejudicial
20 abuse of discretion is established if the agency has not
21 proceeded in a manner required by law or if the decision is
22 not supported by substantial evidence. Respondent further
23 states that a prejudicial abuse of discretion is established
24 if the agency has not proceeded in a manner required by law
25 or if the decision is not supported by substantial
26 evidence. (Respondent's brief in Opposition to Petition,
27 6:25-7:3, citing *Citizens of Goleta Valley v. Board of*
28 *Supervisors* (1990) 52 Cal.3d 553, 564 [Goleta II].)

The Court concludes that respondent's action was quasi-
legislative and that review is governed by Public Resources

1 Code section 21168.5. However, the two code sections embody
2 essentially the same standard of review, i.e., whether
3 substantial evidence supports the agency's determination.
4 (*Laurel Heights Improvement Assn. v. Regents of the*
5 *University of California ("Laurel Heights II")* (1993) 6
6 Cal.4th 112, 1133, fn. 17; *Laurel Heights Improvement Assn.*
7 *v. Regents of the University of California ("Laurel Heights*
8 *I")* (1988) 47 Cal.3d 376, 392, fn. 5.) Thus petitioner's
9 reliance on section 21168 in its brief does not affect the
10 outcome of this case.

11 An EIR is presumed adequate, and the plaintiff in a
12 CEQA case has the burden of proving otherwise. (*Al Larson*
13 *Boat Shop v. Board of Harbor Commissioners* (1993) 18
14 Cal.App.4th 729, 749.)

15 II. ADEQUACY OF THE FINAL PROGRAM ENVIRONMENTAL IMPACT
16 REPORT FOR THE PROJECT

17 A. WHETHER THE FPEIR FAILED TO INCLUDE AN ADEQUATE
18 DESCRIPTION OF THE PROJECT AND FEASIBLE ALTERNATIVES

19 1. One of petitioners' principal contentions is
20 that the project description in the FPEIR failed to provide
21 sufficient detail on the Pacheco alignment to determine the
22 project's impacts in displacing residents and businesses.
23 The FPEIR and the Authority's findings assume that most, if
24 not all, of the proposed high-speed rail line in the area
25 between San Jose and Gilroy would be built within existing
26 right-of-way, "the existing Caltrain corridor." (AR
27 A000031; see also B004187.) However, Union Pacific Railroad
28 had informed the Authority just prior to the publication of
the FPEIR that it would not allow the Authority to use any
of its right-of-way for the Project. (AR E000027.) And

1 after the FPEIR was released, but before the Authority
2 certified the FPEIR and made the related findings and
3 decisions, Union Pacific submitted a longer letter
4 reiterating its unwillingness to share its tracks with High-
5 Speed Rail vehicles. (AR E000003-E000004.)

6 However, the FPEIR appears to show that the portion of
7 the chosen Pacheco alignment between San Jose and Gilroy
8 follows the Union Pacific right-of-way (AR B003944, B003955,
9 B003961, B005105-5109, B006293.) In many places it shares
10 the right-of-way with the Union Pacific line (e.g., AR
11 B005292, B005298, B005300) and is sandwiched between the
12 Union Pacific right-of-way and Monterey Road/Highway (AR
13 B005300, G001425-G001437). If Union Pacific will not allow
14 the Authority to use its right-of-way, it appears it will be
15 necessary for the Authority to obtain additional right-of-
16 way outside of this area, requiring the taking of property
17 and displacement of residents and businesses. However, none
18 of this was addressed in the FPEIR.

19 Respondent argues that a programmatic EIR does not need
20 to contain a high degree of detail, and that detailed
21 information can be deferred to a later site-specific project
22 EIR. (CEQA Guidelines, sections 15146, 15152; *In re Bay*
23 *Delta Programmatic Environmental Impact Report Cases* (2008)
24 43 Cal.4th 1143, 1169-1172.) Respondent contends that the
25 Project description in the FPEIR contains an adequate level
26 of detail for a programmatic EIR. It argues that this EIR
27 was intended to support the Authority in making the
28 fundamental choice of a preferred alignment and station
locations, but not select a precise footprint for high speed
train facilities. More importantly, respondent argues, the

1 FPEIR does not assume use of the Union Pacific right-of-way
2 between San Jose and Gilroy, but rather that it depicts the
3 HST tracks adjacent to Union Pacific's right-of-way; see,
4 e.g., Figure PP-6 at B005292. Respondent contends that this
5 figure also shows there is room for the HST tracks between
6 the Union Pacific right-of-way and Monterey Highway
7 (B005292).

8 Petitioners contend that Figure PP-6 (AR B005292)
9 identifies "Existing ROW" for "Monterey Road" but does not
10 explicitly identify the existing right-of-way for the UP
11 tracks. Petitioners contend that Figures PP-12 (AR B005296)
12 and PP-14 (AR B005298), by contrast, clearly show the HST
13 right-of-way as lying within that existing right-of-way.
14 Several maps show little room between the existing UP tracks
15 and the Monterey Highway (e.g. AR G001432-G001435.)
16 Respondent, in oral arguments, argued a different
17 interpretation of Figure PP-14.

18 The Court concludes that the description of the
19 alignment of the HSR tracks between San Jose and Gilroy was
20 inadequate even for a programmatic EIR. The lack of
21 specificity in turn results in an inadequate discussion of
22 the impacts of the Pacheco alignment alternative on
23 surrounding businesses and residences which may be
24 displaced, construction impacts on the Monterey Highway, and
25 impacts on Union Pacific's use of its right-of-way and spurs
and consequently its freight operations.

26 2. Petitioners contend that the project description
27 failed to provide an adequate explanation or delineation of
28 the project's costs. They contend that the cost estimates
in the FPEIR were inaccurate and skewed to favor the Pacheco

1 Pass alignment alternative by significantly understating the
2 acquisition costs for permanent right-of-way and temporary
3 construction-period right-of-way. They also contend that
4 the cost analyses for Altamont Pass alignment alternatives
5 considered only the cost of a new high or low bridge but not
6 the option of "piggybacking" on the existing Dumbarton rail
7 bridge.

8 The authorities cited by petitioners do not require
9 project cost information to be in an EIR; case authority
10 does, however, hold that cost information is required to
11 support a lead agency's CEQA findings when it rejects
12 alternatives as economically infeasible. (*Uphold Our*
13 *Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587;
14 *Citizens of Goleta Valley v. Board of Supervisors* ("Goleta
15 *I*") (1988) 197 Cal.App.3d 1167.) The Authority did not
16 reject all of the Altamont alternatives as economically
17 infeasible. Furthermore, the Court finds that the FPEIR's
18 cost information is supported by substantial evidence. The
19 evidence includes Chapter 4 (B004624-647) which in turn
20 refers to Appendices 4A and B (B005971-6086, B006087-6180);
and Appendix D (B004637; B004646; B006243).

21 3. Petitioners contend that the FPEIR failed to
22 accurately and impartially describe the operating
23 characteristics of the project alternatives. They contend
24 that the FPEIR failed to accurately describe the frequency
25 of service for the Altamont and Pacheco alternatives in that
26 it did not consider "train-splitting."

27 The Court finds that the EIR provides an adequate
28 description of HSR operations, supported by substantial
evidence. The ridership forecasts were developed by experts

1 in the field of transportation modeling and were subject to
2 three independent peer review panels. (See C001886-88,
3 C001879-964, C001954-60, E004118-148; E004149-187; E004188-
4 97.) Substantial evidence supports respondent's approach of
5 not using train-splitting on main trunk service. Evidence
6 in the record, including evidence submitted by petitioners,
7 shows that train-splitting and coupling is operationally
8 disruptive, and that while some HST systems worldwide use
9 train-splitting and coupling, the use is very limited. (See
10 B004716, B006694, B008032, B008035-36, B008037.)

11 Petitioners also contend that the FPEIR failed to
12 adequately and fairly describe the ridership of the Altamont
13 and Pacheco alternatives. They contend the Pacheco
14 alignment would not draw significant additional recreational
15 ridership because the limited number of stops on the HSR
16 would make it less attractive than the already-existing
17 Caltrain "baby bullet" route, and any additional ridership
18 would be at the expense of Caltrain ridership rather than
19 taking cars off the road.

20 The Court finds that the ridership modeling and
21 forecasts performed by the Authority and the MTC are
22 substantial evidence to support the FPEIR's description of
23 the Pacheco alternative as having higher "recreational and
24 other" ridership than Altamont pass. The ridership analysis
25 concluded that it taps into a very wide market in Santa
26 Clara County (B006696) and also creates a sizeable HST
27 market to and from the Monterey Bay area, a market virtually
28 non-existent for the Altamont Pass alternative (B006695).
The ridership analysis also suggests that some individuals
will pay a premium to ride the HST rather than Caltrain in

1 this corridor based on the service being faster and more
2 reliable. (B006696.)

3 B. WHETHER THE FPEIR AND THE AUTHORITY'S FINDINGS
4 FAILED TO ADEQUATELY IDENTIFY AND MITIGATE THE PROJECT'S
5 SIGNIFICANT IMPACTS

6 Petitioners contend the Authority understated the
7 project's potentially significant impacts and overstated the
8 degree to which those impacts would be adequately
9 mitigated. Petitioners' primary contentions regarding
10 impacts concern biological impacts, growth-inducing impacts,
11 and local impacts along the San Francisco Peninsula (noise,
12 vibration, visual, taking of property and severance impacts,
13 and impacts on mature and heritage trees).

14 1. Exhaustion of administrative remedies:

15 Respondent contends that petitioners failed to exhaust
16 administrative remedies as to any defect in the respondent's
17 CEQA findings on impacts and mitigation, and that therefore
18 the exhaustion of administrative remedies doctrine codified
19 in Public Resources Code section 21177 bars petitioners'
20 claim that respondent's CEQA findings on impacts and
21 mitigation are not supported by substantial evidence. The
22 authorities cited by respondent, including *Mira Mar Mobile*
23 *Community v. City of Oceanside* (2004) 119 Cal.App.4th 447,
24 do not support respondent's contention that it was necessary
25 to specifically object to proposed findings. The Court
26 concludes that the criticisms, comments and objections made
27 to the EIR were sufficient to exhaust administrative
28 remedies as to the issues raised in this case.

2. Biological impacts: Petitioners contend that
the analysis and mitigation of the impacts to the Grasslands

1 Ecological Area ("GEA") along the Pacheco alignment and to
2 the Don Edwards National Wildlife Refuge ("Refuge") along
3 the Altamont alignment were not adequate, were neither equal
4 nor impartial, and were lacking in detail. Petitioners also
5 contend that certain factors are considered for the GEA but
6 not for the Refuge, and that respondent did not adequately
7 consider comments that replacing an existing bridge
8 embankment with an elevated structure on piles would
9 actually enhance conditions in the Refuge.

10 The Court finds that substantial evidence supports
11 respondent's treatment of biological impacts to the GEA and
12 the Refuge. The impacts analysis and mitigation section of
13 the EIR (see generally AR B004462-4538), read together with
14 the responses to comments (see B006584 et seq.; G000807-
15 00814 [Summary of Key Issues on the DPEIR]) constitutes an
16 adequate and impartial analysis of the biological impacts on
17 the two areas. The same methodology was used throughout the
18 area. The level of detail was adequate for a programmatic
19 EIR. The FPEIR's identification of a more detailed
20 mitigation strategy for the GEA (AR B004537) but not for the
21 Refuge is not unreasonable because the lands within the
22 Refuge boundary are already protected. The record does not
23 support petitioners' contention that the inclusion of a more
24 detailed mitigation strategy for the GEA and not the Refuge
25 was the cause of concerns expressed by the U.S. Fish and
26 Wildlife Service (B006366) and the U.S Environmental
27 Protection Agency (B006358) about use of areas within the
28 refuge.

3. Growth-inducing impacts: Petitioners contend
that the analysis of growth-inducing impacts was not

1 adequate. They contend that there was not a sufficient
2 analysis of the impacts in three rural counties—San Benito,
3 Santa Cruz, and Monterey Counties. Petitioners contend that
4 the HSR will extend the area in which existing employees can
5 live and commute to a job in a distant urban center, and
6 that such growth is not analyzed in the FPEIR. Instead,
7 there was analysis as to eleven other counties and San
8 Benito, Santa Cruz, and Monterey Counties were merely
9 included in "the rest of California."

10 The Court finds that the FPEIR contains an analysis of
11 growth-inducing impacts which is sufficient to satisfy
12 CEQA. (Pub. Resources Code, sec. 21100, subd. (b)(5); CEQA
13 Guidelines, sec. 15126(d), 15126.2(d).) Nothing in the
14 Guidelines or in the cases requires more than a general
15 analysis of projected growth. (*Napa Citizens for Honest*
16 *Government v. Napa County Bd. of Supervisors* (2001) 91
17 Cal.App.4th 342, 369.) Respondent relied on established
18 modeling programs, the Transportation and Economic
19 Development Impact System (TREDIS) and the California
20 Urbanization and Biodiversity Analysis (CURBA). Stations
21 will be located in already-urbanized areas and thus the bulk
22 of the growth increase will occur in already urbanized
23 areas. Petitioners' claim that the HSR will result in
24 greater development in the three more distant rural counties
25 is based on speculation, not matters as to which they have
26 technical expertise or which are based on relevant personal
27 observations. (See *Bowman v. City of Berkeley* (2004) 122
28 Cal.App.4th 572, 583.) Respondent's responses to comments
explained that the system would not result in a significant
increase in commute accessibility to the Bay Area for a

1 number of reasons, including the limited number of stations,
2 the localized accessibility benefits provided by these
3 limited stations, the lack, of local transit options in
4 outlying areas, the higher cost of HST use for shorter trips
5 compared to auto use, and time considerations. (B006647-48;
6 B006712-13.) The Court finds the analysis to be
7 sufficient.

8 4. Local impacts along the San Francisco Peninsula

9 -
10 Petitioners contend that the Project will result in
11 significant noise, vibration, and visual impacts; that it
12 will result in significant land use impacts, including
13 specifically taking of property and severance impacts; and
14 that it will impact mature and heritage trees along the
15 right-of-way:

16
17 a. Noise, Vibration, and Visual Impacts

18 Petitioners contend that section 3.4 of the FPEIR,
19 addressing the project's noise and vibrational impacts,
20 failed to identify specific quantifiable standards or
21 criteria used to determine whether the impacts would be
22 significant, and that it identified qualitative criteria but
23 failed to provide evidence by which the public could
24 determine whether these criteria had been met. Further,
25 respondent found that vibrational impacts would be reduced
26 to a level of insignificance (AR000024), but petitioners
27 contend there is no evidence in the record to support this
28 finding.

1 As for noise and vibration impacts, petitioners contend
2 that the FPEIR does not provide appropriately detailed
3 information to show that noise impacts will be reduced below
4 a level of significance. The FPEIR also identifies the need
5 for extensive soundwalls of up to 16 feet in height, but
6 petitioner contends respondent does not address the
7 potential visual impact of these barriers and improperly
8 puts off consideration of such impacts to the project level
9 environmental review.

10 The Court finds that the FPEIR contains an adequate
11 level of detail regarding noise for a program EIR. The
12 analysis used Federal Railroad Administration and Federal
13 Transit Administration criteria and tools to assess noise.
14 (B004100-4105.) The FRA manual contemplates that the
15 evaluation will first look at general questions.
16 (C008070.) It concluded that grade separations at existing
17 crossings would result in noise benefits, and listed
18 mitigation strategies, including design practices, to reduce
19 impacts. (B004120-4137.)

20 The FPEIR also considered all HST alternatives to
21 result in significant noise and vibration impacts for
22 purposes of the programmatic analysis. (B004129.) It noted
23 that more detailed mitigation strategies for noise and
24 vibration impacts would be developed in the next stage of
25 environmental analysis. (B004129-30.) Response to comments
26 noted that project-level environmental review will consider
27 design and profile variations to reduce impacts, as well as
28 design options for noise barriers. (B006480, B006538-40.)
The FRA manual identifies means of mitigating vibrational

1 impacts (C008147; C008176-8180) and noise impacts (C008085,
2 C008117-8122).

3 However, with regard to vibration impacts, the FPEIR
4 states:

5 "Although mitigation measures will
6 reduce vibration impact levels, at the
7 programmatic level *it is uncertain*
8 *whether the reduced vibration levels*
9 *will be below a significant impact.* The
10 type of vibration mitigation and
11 expected effectiveness to reduce the
12 vibration impacts of the HST Alignment
13 Alternatives to a less-than-significant
14 level will be determined as part of the
15 second-tier project-level environmental
16 analyses." (B004131 [emphasis added].)

17 Nevertheless, the Authority, in its CEQA Findings of
18 Fact, found that, as to the impact of vibrations, specified
19 mitigation strategies "will reduce this impact to a less-
20 than significant level." (A000025 [emphasis added].)

21 The Court finds that in light of this contradiction
22 between the FPEIR and the CEQA Findings, the Authority's
23 finding that the mitigation strategies will reduce the
24 vibration impact to a less-than-significant level is not
25 supported by substantial evidence.

26 Visual impacts: The FPEIR recognizes that sound
27 barriers may be necessary mitigation measures along some
28 portions of the HST route through the Peninsula.
29 Petitioners contend that the visual impacts of these
30 barriers should have been analyzed in more detail. However,
31 the extent to which noise barriers would be used could not
32 be known until the next stage of environmental analysis,
33 when engineering and design considerations will be applied
34 on a site-specific basis. (B004129-30.) Sound barriers are

1 discussed in FPEIR section 3.9, Esthetics and Visual
2 Resources, along with mitigation strategies. (B004305-
3 4307.) Visual and esthetic impacts were considered
4 significant and unavoidable. (B004307.) The FPEIR
5 identified subsequent analysis which should be performed.
6 (*Id.*) Respondent found that as part of the site-specific
7 design, many of the impacts on aesthetics and visual
8 resources can be avoided or substantially mitigated, but
9 that it did not have sufficient evidence to make that
10 determination on a program-wide basis. Therefore, for
11 purposes of this programmatic EIR, esthetic and visual
12 impact was considered significant and unavoidable.
13 (A000041.) Respondent adopted a Statement of Overriding
14 Considerations. (A000104-109.)

15 The Court finds that petitioners have failed to
16 establish that respondent failed to adequately analyze the
17 visual impacts of the Project or that it otherwise abused
18 its discretion.

19 b. Land Use Impacts

20 Petitioners contend that the Project will result in
21 significant land use impacts, including taking of property
22 and severance impacts. Atherton contended in its comment
23 letter that the proposed four-track alignment would result
24 in the need to take additional property beyond the existing
25 right-of-way. (B006530.) However, the response to this
26 comment (B006537-40) and the CEQA findings (A000029-33)
27 indicated that the HST tracks were expected to fit within
28 the Caltrain right-of-way.

As discussed elsewhere in this Court's ruling, Union
Pacific has stated it is unwilling to allow its right-of-way

1 to be used for the project. The need for the taking of
2 additional property is a related issue that will be required
3 to be analyzed in connection with further analysis of the
4 impact of Union Pacific's denial of use of its right-of-
5 way.

6 c. Mature and Heritage Trees

7 Petitioners contend that the Project will impact mature
8 and heritage trees along the right-of-way. But the FPEIR's
9 response to Atherton's comments indicates, in part, that a
10 more detailed review of the impacts on mature and heritage
11 trees would be performed at a project level environmental
12 review (B06538) and that the HST is not expected to require
13 the removal of trees along the right-of-way in Atherton
14 (B006538).

15 The Court finds that respondent did not need to conduct
16 a more detailed review of the impacts on trees at this level
17 and properly deferred such analysis to project-level
18 environmental review.

19 C. WHETHER THE FPEIR'S ALTERNATIVES ANALYSIS WAS
20 INADEQUATE AND IMPROPERLY PREDISPOSED TOWARDS THE PACHECO
21 ALIGNMENT

22 Petitioners contend that the Authority's findings
23 improperly determined that all Altamont alternatives were
24 infeasible. Petitioners contend that it improperly
25 determined that there were cost and regulatory obstacles to
26 a Dumbarton Bay crossing; that the decision to eliminate
27 several Altamont choices because of lower ridership and
28 frequency of service was not supported by substantial
evidence; and that construction difficulties for the
Altamont alternatives should not have been the basis for

1 eliminating those alternatives. Petitioners contend
2 solutions and answers existed to meet each of the issues.
3 Petitioners further contend that the Authority's decision to
4 dismiss an alternative using the median of U.S. Highway 101
5 or 1-280 through the Peninsula without analysis violated
6 CEQA.

7 The Court finds that the FPEIR studied a reasonable
8 range of alternatives and presented a fair and unbiased
9 analysis. There were dozens of different ways to build the
10 HST to connect the Bay Area and the Central Valley. The EIR
11 divided the study area into six study corridors, examined
12 different alignment alternatives and station locations
13 options within each corridor, and further broke down the
14 alignment alternatives into segments.

15 Substantial evidence supports the FPEIR's discussion of
16 operational and environmental issues related to the Altamont
17 Pass alternatives. The potential environmental impacts of
18 the alternatives were discussed in Chapter 3 of the FPEIR.
19 Chapter 7 of the EIR summarizes and compares the
20 environmental consequences of 21 representative network
21 alternatives, defining the major tradeoffs among the
22 possible network alternatives. This fostered informed
23 public participation and decision-making. (*Laurel Heights*
24 *Improvement Assn. v. Regents of the University of California*
25 (*"Laurel Heights I"*) (1988) 47 Cal.3d 37, 404.)

26 The Court finds that substantial evidence in the record
27 supports the FPEIR's explanation that putting the HST system
28 over the existing, out-of-service Dumbarton Rail Bridge is
not reasonable. (See, e.g., GB003926-27 [existing retrofit
plans involve only a single track], B006687 [HST requires

1 two separated and dedicated tracks], B006368, B006687,
2 B006742.) The EIR reasonably concludes that a shared
3 Caltrain/HST Dumbarton crossing would require at least a new
4 double track bridge. (B003926-927, B006687; G000809.) The
5 Bay Area regional Rail Plan reached the same conclusion.
6 (D001484.) Furthermore, the existing Dumbarton Rail Bridge
7 has two swing bridges that pivot to allow ship traffic, a
8 systemic vulnerability which is inconsistent with the speed,
9 reliability and safety requirements of the HST system.
10 (B006687, B004044.)

11 The Court also finds that the FPEIR reasonably
12 concluded that train-splitting was not a reasonable
13 alternative, and that avoiding additional branch splits
14 would benefit train operations and service. The FPEIR and
15 the CEQA Findings treat the branch issue equally for both
16 Altamont Pass and Pacheco Pass.

17 The Court also finds that the FPEIR accurately
18 describes construction challenges for the Altamont Pass with
19 a Bay crossing or using the I-880 median. The challenges
20 for a Bay crossing include loss of wetland habitats in the
21 Bay associated with a new Bay crossing, the potential
22 difficulty of obtaining the types of permits and
23 environmental clearances needed to build a new Bay crossing
24 because of the limits which federal law imposes on
25 activities within the Don Edwards National Wildlife Refuge,
26 and the permitting jurisdiction of the Bay Conservation and
27 Development Commission. The record shows that the
28 construction challenges for use of the I-880 median are
complex - a complexity also recognized by the Metropolitan
Transportation Commission.

1 The Court further concludes that the record supports
2 the Authority's decision to exclude from further detailed
3 study an alternative using the median of U.S. Highway 101 or
4 1-280 through the Peninsula. The primary reason for
5 eliminating these alignment alternatives was the need to
6 construct an aerial guideway for the train adjacent to and
7 above the existing freeway, while maintaining freeway access
8 and capacity during construction. Such need would result in
9 substantially increased construction costs and
10 constructability issues. These alignments would also have
11 significant or potentially significant environmental
12 impacts, due to height and proximity to wildlife preserves.
13 The evidence supports the elimination of the 101 and 280
14 alignment alternatives from detailed study.

15 III. WHETHER THE AUTHORITY IMPROPERLY REFUSED TO RECIRCULATE
16 THE DRAFT PROGRAM EIR AFTER UNION PACIFIC'S ANNOUNCEMENT OF
17 ITS
18 UNWILLINGNESS TO ALLOW USE OF ITS RIGHT-OF-WAY

19 Petitioners contend that portions of the Pacheco
20 alignment as analyzed by respondent are dependent upon the
21 use of Union Pacific Railroad's right-of-way, and that
22 respondent improperly refused to recirculate the DPEIR after
23 Union Pacific Railroad announced its unwillingness to allow
24 use of its right-of-way shortly before respondent's approval
25 of the Pacheco alignment.

26 Respondent contends that the alignment is not dependent
27 upon the use of Union Pacific's right-of-way.

28 However, this Court concludes that various drawings,
maps and photographs within the administrative record
strongly indicate that it is. The record further indicates

1 that if the Union Pacific right-of-way is not available,
2 there may not be sufficient space for the right-of-way
3 needed for the HST without either impacting the Monterey
4 Highway or without the takings of additional amounts of
5 residential and commercial property.

6 These are significant impacts which were sufficient to
7 trigger the recirculation of the FPEIR. However, respondent
8 failed to take such further action after it received Union
9 Pacific's statement of its position.

10 IV. WHETHER THE AUTHORITY FAILED TO CONSIDER OR RESPOND TO
11 MENLO PARK'S COMMENT LETTER ON THE DPEIR

12 This issue is moot in light of the Court's ruling
13 denying the motion to augment the administrative record. In
14 that ruling, the Court determined that the evidence was
15 insufficient to establish that Menlo Park's comment letter
16 was received by the Authority. The Authority was not
17 required to consider or respond to a comment letter it did
18 not receive.

19 V. RESPONDENT'S CONTENTION THAT PETITIONERS FAILED TO
20 EXHAUST ADMINISTRATIVE REMEDIES

21 Respondent contends that petitioners failed to exhaust
22 administrative remedies as to any defect in the respondent's
23 CEQA findings on impacts and mitigation, and that therefore
24 the exhaustion of administrative remedies doctrine codified
25 in Public Resources Code section 21177 bars petitioners'
26 claim that respondent's CEQA findings on impacts and
27 mitigation are not supported by substantial evidence. As
28 stated in the Court's discussion of arguments concerning
impacts, *supra*, the Court concludes that petitioners

1 exhausted their administrative remedies as to the issues
2 raised in this case.

3
4
5 VI. PALO ALTO'S AMICUS CURIAE BRIEF

6 Palo Alto was granted leave to file an amicus brief.
7 However, its brief has raised legal issues not raised and
8 briefed by the parties, including challenges to the use of a
9 second program EIR, the Authority's treatment of land use
10 compatibility, and an alleged failure to consult Palo Alto.
11 For this reason its arguments have been disregarded by the
12 Court.

13 VII. CONCLUSION

14 The Court finds petitioners have met their burden of
15 showing that the EIR contains an inadequate description of
16 the project, that respondent's finding that mitigation
17 strategies will reduce the vibration impact to a less-than-
18 significant level is not supported by substantial evidence,
19 that as a result of the FEIR's inadequate description of the
20 project its land use analysis was inadequate, and that
21 respondent improperly failed to recirculate the FPEIR upon
22 receipt of Union Pacific's statement of its position
23 regarding its right-of-way. The petition for writ of
24 mandate is granted on these grounds.

25 Petitioners' other contentions are without merit.

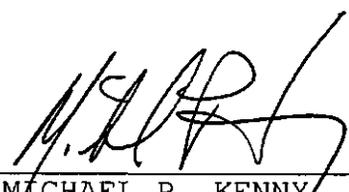
26 VIII. DISPOSITION

27 Petitioners shall prepare a judgment consistent with
28 this ruling and in accordance with California Rules of
Court, rule 3.1320 and Local Rule 9.16. Petitioners shall
also prepare a writ for issuance by the clerk of the court.

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Petitioners shall recover their costs pursuant to a memorandum of costs.

DATED: August 26, 2009



MICHAEL P. KENNY
JUDGE OF THE SUPERIOR COURT

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CERTIFICATE OF SERVICE BY MAILING

(C.C.P. Sec. 1013a(3))

I, the Clerk of the Superior Court of California, County of Sacramento, certify that I am not a party to this cause, and on the date shown below I served the foregoing **RULING** by depositing true copies thereof, enclosed in separate, sealed envelopes with the postage fully prepaid, in the United States Mail at Sacramento, California, each of which envelopes was addressed respectively to the persons and addresses shown below.

- Stuart Flashman
Attorney at Law
5626 Ocean View Drive
Oakland, CA 94618

- Jeff Hoffman
Attorney at Law
132 Coleridge Street #B
San Francisco, CA 94110

- Danae Aitchison
Attorney at Law
1300 I Street #Suite 125
Sacramento, CA 94244

- Kristina Lawson, Arthur Coon
Attorney at Law
1331 N California Blvd., Fifth Floor
Walut Creek, Ca 94596

I, the undersigned deputy clerk, declare under penalty of perjury that the foregoing is true and correct.

Dated: **AUG 26 2009**

Superior Court of California,
County of Sacramento

Deputy Clerk

APPENDIX B

**CITY OF SAN JOSE LETTER
SUPPORTING RECONSTRUCTION OF MONTEREY HIGHWAY**

October 20, 2009

Mr. Dan Leavitt
Deputy Director
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: Merced-San José Section High-Speed Train Project - Monterey Highway Corridor

Dear Mr. Leavitt,

The purpose of this letter is to confirm that the City of San José is aware of the possible reduction in the width of Monterey Highway in South San José in order to accommodate the proposed California High Speed Train (HST) project. Attached are several documents that detail the steps the City has taken to date to assist the California High Speed Rail Authority in evaluating the possible reduction of lanes of Monterey Highway to accommodate the project.

- San José to Merced HST Project EIR/EIS Scoping Letter - In the April 7, 2007 letter (copy attached) to the High Speed Rail Authority, the City of San José acknowledged the proposal for “four lanes on Monterey Highway (reduced from six lanes)” in an effort to achieve the “benefits of avoiding property acquisition along the corridor.”
- San José General Plan Update Actions - The City of San José is currently developing a comprehensive update to the City’s General Plan referred to as Envision San Jose 2040. The effort is being managed by a 36 member task force of elected officials and community leaders. On June 22, 2009, the Task Force approved a list of proposed changes to San Jose’s roadway network to be considered and approved by the City Council at a later date. Among the proposed changes unanimously endorsed by the Task Force was a reduction of Monterey Highway from 6 to 4 lanes (from Umbarger to Metcalf) for the expressed purpose of accommodating the High Speed Train project. See Agenda item #6, Action #14 from the June 22, 2009 Task Force meeting (copy attached).
- State Route Relinquishment - Portions of Monterey Highway in San José are part of State Highway 82 under the jurisdiction of Caltrans. However, the City of San José operates and maintains the facility as part of a maintenance agreement with Caltrans. As noted in the letter from June 17, 2009 (copy attached), the City and Caltrans are pursuing relinquishment of Monterey Highway from Caltrans to San José in an effort to further facilitate any possible corridor modifications necessitated by the ongoing development of the HST project.

Mr. Dan Leavitt
Subject: Monterey Highway Corridor
October 20, 2009
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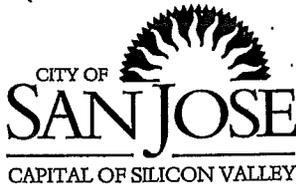
The City of San José is a strong supporter of the HST project and we look forward to continuing to work with your staff and consultant team to develop and deliver this important project. Please contact Ben Tripousis of my staff at 408-975-3717 if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Hans F. Larsen", with a long horizontal flourish extending to the right.

Hans F. Larsen, Acting Director
Department of Transportation

Attachments



Department of Transportation

JAMES R. HELMER - DIRECTOR

April 7, 2009

Mr. Dan Leavitt, Deputy Director
California High-Speed Rail Authority
925 L Street, Suite #1425
Sacramento, CA 95814

SUBJECT: San José to Merced HST Project EIR/EIS Scoping

Dear Mr. Leavitt:

The City of San José is pleased to provide input into the scoping of the Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) for the San Francisco to San José segment of the California High-Speed Train (HST) project. The City is a strong supporter of the project and its goals to improve mobility, protect the environment, enhance the economy, and responsibly plan for the future. We commend the California High Speed Rail Authority Board and staff for their leadership in developing this important project, and we commend the voters of California for approving Proposition 1A (in November 2008) to help finance the project.

As you are aware, San José is actively engaged in helping to develop the project in a manner that supports the timely delivery of HST service for San José and the Bay Area, and also in a manner that effectively manages and minimizes the environmental impacts of the project for the communities adjacent to the nearly 20-mile HST route through San José.

We appreciate the strong collaboration that the HST team has had with San José staff and the community thus far. On December 18, 2008, HST staff and consultants participated in an all-day workshop at San José City Hall to discuss issues and interests with over thirty City staff members representing the City Manager's Office, Transportation, Public Works, Planning, Parks, Cultural Affairs, Redevelopment, and the Strong Neighborhood Initiative program. In addition, HST staff has held or participated in six community meetings in the San José area over the past three months. Based on these recent communications, we believe the HST team has a good understanding of project issues within San José. We look forward to continuing an ongoing collaboration in the development of the project.

With regards to the scoping of the Project EIR/EIS, we understand the HST project will conduct the environmental analysis required by the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA). This includes addressing project issues and impacts related to transportation; safety and security; land use and zoning; land acquisition, displacement and relocations; historic and archaeological resources; park and recreation areas; neighborhood compatibility and environmental justice; visual quality and aesthetics; noise and

Mr. Dan Leavitt
Subject: San José to Merced HST Project EIR/EIS Scoping
April 7, 2009
Page 2 of 3

vibration; wildlife and ecosystems; air and water quality; public and private utilities; flooding; hazardous materials; energy; and construction operations.

We advise that the HST team to continue to consult with City staff during the initial development of the environmental studies to obtain information on existing conditions and current planning, with a particular focus on the topics of historic resources, land use, parks, trails, utilities, floodplains, transportation, and energy. Note that we have a particular interest in developing opportunities for renewable energy generation along the HST corridor. We also encourage an ongoing public participation process with communities affected by the project to assure issues are addressed and reasonable mitigation measures are identified.

In addition, the following comments are provided on special topics of interest to San José related to the scope of the EIS/EIR.

▪ *Study Profile and Alignment Options in the Greater Downtown San José Area*

For the greater Downtown San José area (including the Delmas Park, Gardner, and North Willow Glen neighborhoods), the preliminary design concept is for the HST to follow the Caltrain right-of-way and be elevated or at-grade. At the Diridon Station the HST train is proposed to be elevated as high as 70 feet. The visual and noise impacts of the HST for Downtown and adjacent neighborhoods is of significant concern to San José. Therefore, we request that the project prepare and analyze the following profile and alignment options.

1. Current Project Plan with Elevated Profile Having an Attractive Visual Design and Noise Mitigation Appropriate for the Community Context
2. Below Grade Profile between Julian Street and Tamien Station Area to Avoid Noise and Visual Impacts in the Greater Downtown San José Area
3. Align HST along Route 280 and Route 87 to Reduce Impacts to Gardner and North Willow Glen Neighborhoods
4. Provide 3-Tracks (Instead of 4-Tracks for HST, Caltrain, and UPRR) to Lessen or Avoid Physical Impacts in the Gardner and North Willow Glen Neighborhoods

The analysis should provide for a full comparison of the options based on visual impacts, aesthetics, noise, property impacts, constructability, cost, and community acceptance. It is noted that the HST profile and alignment issue for the Downtown San José area will need to be addressed and coordinated between the environmental documents for both the "San Francisco to San José" and the "San José to Merced" segments of the HST project, since the issue overlaps both segments.

Mr. Dan Leavitt
Subject: San José to Merced HST Project EIR/EIS Scoping
April 7, 2009
Page 3 of 3

▪ Confirm and Refine HST Design Concept in Monterey Highway Corridor from Capitol Expressway to Morgan Hill

The preliminary design concept for the HST project through the southern part of San José (from Capitol Expressway to Morgan Hill) is based on the assumption of having the HST tracks located on right-of-way currently used by the Union Pacific Railroad and Monterey Highway. A compact design allowing four tracks (for HST, Caltrain, and UPRR) and four-lanes on Monterey Highway (reduced from six-lanes) has the benefits of avoiding private property acquisition along the corridor.

Also, along this corridor are many existing grade crossings, some existing grade separations, and plans for new grade separations. Some of the crossings may warrant closure and some of the existing grade separations may need to be replaced. The design assumptions and concepts for this corridor need to be confirmed in order to appropriately assess the environmental impacts of the project in the corridor. We request the HST team work closely with San Jose and Morgan Hill and their affected communities along the corridor to refine the project scope and/or identify design alternatives for further study.

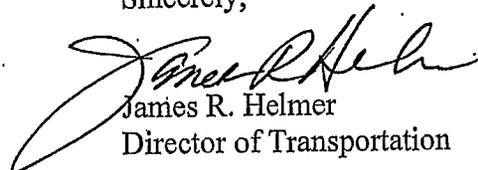
▪ Consider "Starter Segment" HST Service Between San Francisco, San José and Gilroy

The City of San José supports early implementation of "usable segments" of the HST system as funding is obtained to complete the planned initial service between San Francisco, San José, Fresno, Los Angeles and Anaheim. San José requests that the San Francisco/San José/Gilroy segment be evaluated as a "starter segment" for HST service. We prefer this to having a shorter "starter segment" between San Francisco and San José.

The advantages of the San Francisco/ San José/ Gilroy segment are: 1) it avoids temporary "end of the line" traffic and construction impacts in Downtown San José; 2) it fully integrates the HST with existing Caltrain service (currently between San Francisco and Gilroy) with respect to service, electrification, grade separations and agency coordination; and, 3) it provides service proximity to the Salinas, Monterey and Santa Cruz areas that demonstrated strong support for the HST project.

Again, we appreciate the opportunity to participate in the development of the High Speed Train project. We look forward to continued progress towards project implementation.

Sincerely,


James R. Helmer
Director of Transportation

c: Michael Burns, VTA
Michael Scanlon, Caltrain/JPB
Joe Horwedel, CSJ/PBCE



Task Force Meeting No. 23

San José City Hall, Council Wing W118, W119 and W120
200 East Santa Clara Street
Monday, June 22, 2009
6:30 p.m. to 9:00 p.m.

Note: All personal electronic devices must be turned off to avoid electronic interference with the sound system.

Agenda

Meeting Outcomes: Review of transportation network changes for the four Land Use Study Scenarios, initiate Phase 2 of the General Plan Update process, and identify arts and cultural issues to be integrated into Envision San José 2040.

- | | |
|-------------------------------------------------------------------------------|---------|
| 1. Welcome | 5 min. |
| 2. Review and approval of May 26, 2009 Task Force Synopsis | 5 min. |
| 3. Updates: | 10 min. |
| a) Recent stakeholder outreach | |
| b) June 16 City Council Action | |
| c) Other on-going City Planning efforts | |
| 4. Recommended Roadway Network Changes for the Four Land Use Study Scenarios | 30 min. |
| 5. Public Comment on Recommended Roadway Changes | 10 min. |
| 6. Task Force Vote on Staff's Recommended Changes to the Roadway Network | 10 min. |
| 7. Initiation of Envision Phase 2 – Discussion on Where We are Going | 15 min. |
| 8. Economic Development Strategy Update | 10 min. |
| 9. Defining the Vision for Vibrant Arts and Culture in Envision San José 2040 | |
| a) Presentation | 10 min. |
| b) Discussion | 30 min. |
| 10. Public Comment | 10 min. |
| 11. Announcements | 5 min. |
| 12. Adjourn | |

Next Meeting:

Task Force Meeting No. 24 – Monday July 27, 2009, 6:30 to 9:00 p.m. Topics tentatively include development of policies for parks, recreation and open space.

NOTE

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please call Lee Butler at 408-535-7851 or 408-294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at Planning, Building and Code Enforcement, 200 E. Santa Clara Street, 3rd Floor Tower, San José, CA 95113 at the same time that the public records are distributed or made available to the legislative body.



**Task Force Meeting No. 23 Synopsis
June 22, 2009**

Task Force Members Present*:

Co-Chair Sam Liccardo, Co-Chair Shirley Lewis, Vice-Chair David Pandori, Shiloh Ballard, Michele Beasley, Frank Chavez, Gary Chronert, Pastor Oscar Dace, Pat Dando, Harvey Darnell, Dave Fadness, Enrique Fernandez, Sam Ho, Nancy Ianni, Lisa Jensen, Frank Jesse, Matt Kamkar, Charles Lauer, Karl Lee, Linda LeZotte, Pierluigi Oliverio, Dick Santos, Patricia Sausedo, Erik Schoennauer, Judy Stabile, Alofa Talivaa, Michael Van Every, Jim Zito.

Task Force Members Absent:

Jackie Adams, Teresa Alvarado, Judy Chirco, Mary Creasman, Yolanda Cruz, Leslee Hamilton, Jennifer Rodriguez, Neil Struthers.

City Staff and Other Public Agency Staff Present*

Anastasia Aziz (City Manager Office), Roma Dawson (Council Office, D3), Matt Krupp (ESD), Jared Hart (ESD), Peter Hamilton (Council Office, D9), Hans Larsen (DOT), Manuel Pineda (DOT), Kim Welsh (OED), Kerry Adams-Hapner (CAE), Barbara Goldstein (CAE), Joseph Horwedel (PBCE), Laurel Prevetti (PBCE), Andrew Crabtree (PBCE), Lee Butler (PBCE), John Baty (PBCE)

Public Present*:

Trixie Johnson (LWV), Brian Abbott, Bill Sowa (HMH), Larry Ames, Tom Rossi (WGHA), Erin Goodwin-Guerrero (Artshift San Jose), Jessica Zeak, Jean Dresden, Mike Conner (WGNA), Patricia Walsh, Terri Balandra (F.L.A.G.), Virginia Holtz, Leah Toeniskoetter, Harold Clay, Pat Readon (LWV), Anjee Helstrip-Alvarez (MACLA), Cathleen King (Stan Jose Stage Co.), Mary Smith (San Jose Stage Co.), Chris Hugheseralia

*As verified by registering attendance on Sign-In Sheets.

1. Welcome

The meeting convened at 6:35 p.m.

2. Review and approval of May 26, 2009 synopsis

May 26, 2009 synopsis approved

3. Updates: (a) Recent Stakeholder Outreach, (b) June 16th City Council Action, (c) Other on-going City Planning Efforts

Andrew Crabtree (PBCE) summarized the discussion at and outcome of the June 16th City Council hearing. He provided an update on the June 11, 2009 meeting between City staff and the property owners from Coyote Valley and South Almaden Valley Urban Reserves, and provided an update on the Wikipanning effort. Andrew then briefed the Task Force on other on-going City Planning efforts such as the Diridon Station Area Plan, North San Jose Vision, Alum Rock Form Based Zoning, and proposed A's Baseball Stadium.

4. Recommended Roadway Network Changes for the Four Land Use Study Scenarios

Hans Larsen (DOT) presented the proposed preliminary transportation network (*Envision 2040 – Preliminary Street Network*) to be used as a starting point for the transportation analysis in each land use growth scenario. The proposed network includes changes to the current General Plan street network to bring it into greater alignment with the Task Force's *Draft Land Use & Transportation Design Guidelines* and to address other recently adopted City policies. The Task Force discussed and made recommendations for the proposed designations for several specific streets. See agenda item #6 below for the specific list of network streets reconsidered at the request of the Task Force.

5. Public Comment on Recommended Roadway Changes

Four members of the public spoke on the issue of DOT's preliminary street network. Streets for which public comments were received are noted with an asterisk ("*") in agenda item #6 below.

6. Task Force Vote on Staff's Recommended Changes to the Roadway Network

The Task Force unanimously voted to approve staff's recommended changes to the roadway network, with the exception of several specific streets on which the Task Force disagreed with the initial staff proposal. DOT staff indicated that they would re-evaluate those streets which received comments from the Task Force or members of the public at the Task Force meeting. A list of the streets identified follows (with numbers referencing DOT's *Envision 2040 – Preliminary Street Network* handout and asterisks ["*"] indicating that at least one member of the public commented on the street):

Winchester Blvd. (115)
King Rd. (Alum Rock to Capitol Ex.)
San Pedro (58)
Spring (between Taylor & Hedding)
Auzerais
St. John St. (under 87)
River St.
Fruitdale (108)
Santa Teresa (131/132)
Curtner (123)
Charcot (120)
Unnamed street in Alviso (141)
Zanker (144)*
Tully Rd.
White Rd.
Snell (138)
San Carlos (130)*
Senter Rd. (135)*
Alma Ave.*
Lincoln Ave.*
10th & 11th (94 & 95) Typographical error needs to be corrected.

7. Initiation of Envision Phase 2 – Discussion on Where We are Going

This agenda item was postponed until the July Task Force meeting due to the lack of time remaining.

8. Economic Development Strategy Update

Kim Walesh (OED) updated the Task Force on the preparation of the City's 5-year economic development strategy and as an introduction to the next Task Force agenda item, noted that arts and culture is an important part of the City's strategy. A Task Force member asked if the City's 5-year strategy could be presented to the Task Force prior to its presentation to City Council. The economic development strategy will be placed on a later Task Force meeting agenda.

9. Defining the Vision for Vibrant Arts & Culture in Envision San Jose 2040

Kerry Adams-Hapner and Barbara Goldstein (CAE) presented information on San Jose's Cultural Vision for 2040, with the four focus areas being Arts & Economic Prosperity, Cultural Participation, Cultural Pluralism, and Innovation.

The Task Force then discussed the meaning of vibrant arts and culture relevant to San Jose and how we can create a better San Jose through arts and culture. As part of the discussion Task Force members suggested that staff research cultural plans from other cities, and that the City's policies address multi-use or adaptable arts spaces, low-cost arts spaces, utilization of historic buildings/resources to promote the development of arts and culture, and further exploration of how arts and culture serve as an attractive resource to various ethnic communities.

10. Public Comment

Three members of the public spoke. Speakers praised the City for waiving Business Permit fees for artists, promoted use of the village centers for festivals and events, and recommended that the City pursue public-private ventures/partnerships to promote arts and culture.

11. Announcements

Lee Butler reminded the Task Force of the Wikiplanning launch and the need for their assistance in promoting it to their contacts.

12. Adjourn

The meeting adjourned shortly after 9:00 p.m.

Envision 2040 – Preliminary Street Network
Proposed Changes to Current General Plan Street Network
June 2009

The City of San Jose has approximately 2400 miles of streets within its jurisdiction, of which approximately 500 miles are designated as General Plan streets serving as the City's primary circulation network for community mobility. These General Plan streets are also referred to as arterials and collectors. The General Plan specifies the intended width and traffic capacity of the streets as 2-lanes, 4-lanes, or 6-lanes.

One goal of the Envision 2040 planning process is to update the City's transportation plan, and in particular to align with the Guiding Principles related to multimodal transportation, economic development, community livability, and environmental sustainability. The General Plan street network was last comprehensively reviewed more than a decade ago.

A preliminary street network plan has been developed as a "starting point" for transportation analysis of proposed land use scenarios identified for Envision 2040. Refining the street network will be subject to further review by the Envision 2040 Task Force. The attached tables and exhibit document proposed changes to the General Plan street network in terms of number of lanes for motor vehicles. The proposed changes are organized into the following four groupings:

- **Group 1 Actions** – Change Current General Plan Street Network to **Reconcile with Existing "Built-Out" Street Operations**
- **Group 2 Actions** – **Reconfirm Recent Policy Actions to Support Multimodal and Livable Streets or Consistency with Regional Plans**
- **Group 3 Actions** – Change Current General Plan to **Accommodate Multimodal Streets**
- **Group 4 Actions** – Confirm Existing General Plan to **Expand Street Capacity**

Envision 2040 - Preliminary Street Network

Proposed Changes to Current General Plan Street Network

June 2009

Group 1 Actions - Reconcile with Existing

#	Street	From	To	Lanes		
				GP2020	Existing	GP2040
1	2nd	San Carlos	Jackson	3	2	2
2	7th	Keyes	Curtner	4	2	2
3	Almaden	Canoas Garden	Curtner	4	2	2
4	Bailey	IBM	McKean	4	2	2
5	Bernal	Heaton Moor	Santa Teresa	4	2	2
6	Berryessa	1680	Piedmont	6	4	4
7	Beswick	Blossom Hill	Cottle	4	2	2
8	Bird	Coe	Virginia	6	4	4
9	Blossom	Blossom Hill	Santa Teresa	4	2	2
10	Blossom Hill	w/o Union		4	2	2
11	Cahalan	Blossom Hill	Santa Teresa	4	2	2
12	Camden	Almaden	Blossom Hill	6	4	4
13	Camden	Del Paso (SR85)	Hillsdale	6	4	4
14	Camden	Almaden	Harry	4	2	2
15	Cherry	Almaden	Branham	4	2	2
16	Coleman	Camden	Meridian	4	2	2
17	Commercial	Oakland	Berryessa	4	2	2
18	Commercial	W. of Oakland	--	4	2	2
19	Delta	Ruby	San Felipe	4	2	2
20	Doyle	Lawrence	Saratoga	4	2	2
21	E. Reed	2nd	4th	4	2	2
22	Fortini	n/o McKean	--	4	2	--
23	Fruitdale	Meridian	Southwest Expwy	4	4	4
24	Hamilton	Leigh	Meridian	6	4	4
25	Hamilton	Campbell	City boundary	6	4	4
26	Hamilton/Pine	Meridian	Cherry	4	2	2
27	Hanchet	Park	The Alameda	2	2	--
28	Harry	Camden	McKean	4	2	2
29	Hostteter	Morrill	Piedmont	4	2	2
30	Julian	The Alameda	Montgomery	4	2	2
31	Keyes	10th	11th	6	4	4
32	King	Alum Rock	McKee	4	2	2
33	Lean	Blossom Hill	Chynoweth	4	2	2
34	Leigh	Parkmoor	San Carlos	4	2	2
35	Little Orchard	Curtner	San Jose	4	2	2
36	Los Gatos Almaden	Harwood	City boundary	4	2	2
37	Mabury	Capitol	White	4	2	2
38	Marten	Mt Pleasant	White	4	2	2
39	McKean	Bailey	Harry	4	2	2
40	Meridian	Park	San Carlos	4	2	2
41	Meridian	Coleman	Camden	4	2	2
42	Miller	Bollinger	Prospect	4	2	2
43	Minnesota	Hicks	Meridian	4	2	2
44	Monroe/Tisch	Stevens Creek	Winchester	--	2	2
45	Mt. Pleasant/Ruby	Delta	Fowler	4	2	2
46	Murillo	Quimby	Tully	4	2	2
47	Nieman	Capitol	Yerba Buena	4	2	2
48	Payne	Saratoga	Winchester	4	2	2
49	Phelan	Monterey	Tenth	4	2	2
50	Piedmont/White	Landess	McKee	4	2	2

Envision 2040 - Preliminary Street Network

Proposed Changes to Current General Plan Street Network

June 2009

Group 1 Actions - Reconcile with Existing

#	Street	From	To	Lanes		
				GP2020	Existing	GP2040
51	Quito	SR85	Saratoga	4	2	2
52	Race	1280	Fruitdate	4	2	2
53	Redmond	Camden	Coleman	4	2	2
54	River Oaks	1st	Zanker	4	2	2
55	Samaritan	Union	Samaritan Place	4	2	2
56	San Antonio	King	Jackson	4	2	2
57	San Felipe	Aborn	Delta	6	4	4
58	San Pedro	Hedding	Mission	4	2	2
59	San Tomas Aquino	Payne	Saratoga	4	2	2
60	San Tomas Aquino (Fenian/Harriet)	Bucknall	Westmont	4	2	2
61	Sanchez	[dead end]	Blossom Hill	4	2	2
62	Senter	Capitol	Singleton	6	4	4
63	Senter	Monterey	Hellyer	4	2	2
64	Senter	Hellyer	Slyvandale	4	3	2
65	Sierra	Morrill	Piedmont	4	2	2
66	Silicon Valley	US101	Basking Ridge	6	4	4
67	Snell	SR85	Blossom Hill	6	4	4
68	Southwest	Meridian	Stokes	6	4	4
69	Southwest	Bascom	Stokes	6	2	2
70	Trinidad	Almaden	Camden	4	2	2
71	Tully	Ruby	White	6	4	4
72	Union	Blossom Hill	LGAlmaden	4	2	2
73	Via Valiente	Almaden	Camden	4	2	2
74	W. Reed	1st	2nd	4	2	2
75	Williams	Moorpark	Winchester	4	2	2
76	Willow	Almaden	Lelong	4	2	2
77	Yerba Buena/Slyvandale	McLaughlin	Senter	4	2	2

Envision 2040 - Preliminary Street Network

Proposed Changes to Current General Plan Street Network

June 2009

Group 2 Actions - Reconfirm Recent Policy

#	Street	From	To	Lanes		Comments
				GP2020	Existing GP2040	
78	101/Branham Interchange	--	--	--	--	Edenvale Area Plan
79	101/Metcalf Interchange	--	--	IC	--	Coyote Valley Area
80	Airport Blvd	Airport/Brokaw	Coleman	6	2	Airport Master Plan
81	Airport Pkwy	US101	Airport Blvd	6	4	Airport Master Plan
82	Chynoweth	Colony Field	Snell	4	2	General Plan Amendment (Lester Park, 2000)
83	Chynoweth	Barron Park	Pearl	4	2/4	General Plan Amendment (Lester Park, 2000)
84	Chynoweth	Barron Park	Colony Field	--	0	General Plan Amendment (Lester Park, 2000)
85	Julian	SR87	Market	4	2	Downtown Strategy Plan
86	Montgomery	Park	W. Santa Clara	4	2	Downtown Strategy Plan
87	Montgomery	Julian	St. John	4	2	Downtown Strategy Plan
88	Park	Delmas	Montgomery	4	2	Downtown Strategy Plan
89	St. John	Autumn	Montgomery	4	2	Downtown Strategy Plan
90	Taylor	1st	4th	4	2	Council Action
91	Vista Park	Hyde Park	Capitol	4	2	General Plan Amendment (Lester Park, 2000)
92	Vista Park	Hyde Park	Blossom Hill	--	0	General Plan Amendment (Lester Park, 2000)
93	Winfield	Almaden	Coleman	--	0/2/4	General Plan Amendment (Lake Almaden Park, 2004)
94	10th	Keyes	Santa Clara	--	2/3	Downtown Couplet Conversion Program
95	11th	Keyes	Santa Clara	--	3	Downtown Couplet Conversion Program
96	10th	Santa Clara	Hedding	--	3	Downtown Couplet Conversion Program
97	11th	Santa Clara	Hedding	--	3	Downtown Couplet Conversion Program
98	2nd	E. Reed	Humboldt	4	3	Downtown Couplet Conversion Program
99	3rd	E. Reed	Humboldt	4	3	Downtown Couplet Conversion Program
100	3rd	Jackson	Julian	4	2	Downtown Couplet Conversion Program
101	4th	Taylor	Julian	4	2	Downtown Couplet Conversion Program
102	Julian	Market	24th	4	2	Downtown Couplet Conversion Program
103	St. James	Market	19th	4	2	Downtown Couplet Conversion Program
104	S. Almaden	Grant	Alma	4	2	Downtown Couplet Conversion Program
105	Vine	Grant	Alma	4	2/3	Downtown Couplet Conversion Program

Envision 2040 - Preliminary Street Network

Proposed Changes to Current General Plan Street Network

June 2009

Group 3 Actions - Accommodate Multimodal Streets

#	Street	From	To	Lanes			Comments
				GP2020	Existing	GP2040	
106	Alma	Lelong	Senter	4	4	2	Primary Bikeway Corridor
107	Branham	Almaden	Monterey	6	2/4/6	4	Primary Bikeway Corridor
108	Fruitdale	Bascom	Southwest Expwy	4	4	2	SNI Project
109	Hedding	Coleman	Winchester	4	4	2	Primary Bikeway Corridor
110	Hedding	4th	17th	4	4	2	Primary Bikeway Corridor
111	Hillsdale	Almaden	Camden	6	6	4	Staff Proposal
112	Leigh	Blossom Hill	Stokes	4	2/4	2	Primary Bikeway Corridor
113	Monroe	city boundary	Stevens Creek	4	2	2	Primary Bikeway Corridor
114	Monterey	Umbarger	Metcalf	6	4/5/6	4	High Speed Rail Corridor
115	Winchester	Magliocco	Hamilton	6	5/6	4	Draft Business District Strategy

Envision 2040 - Preliminary Street Network

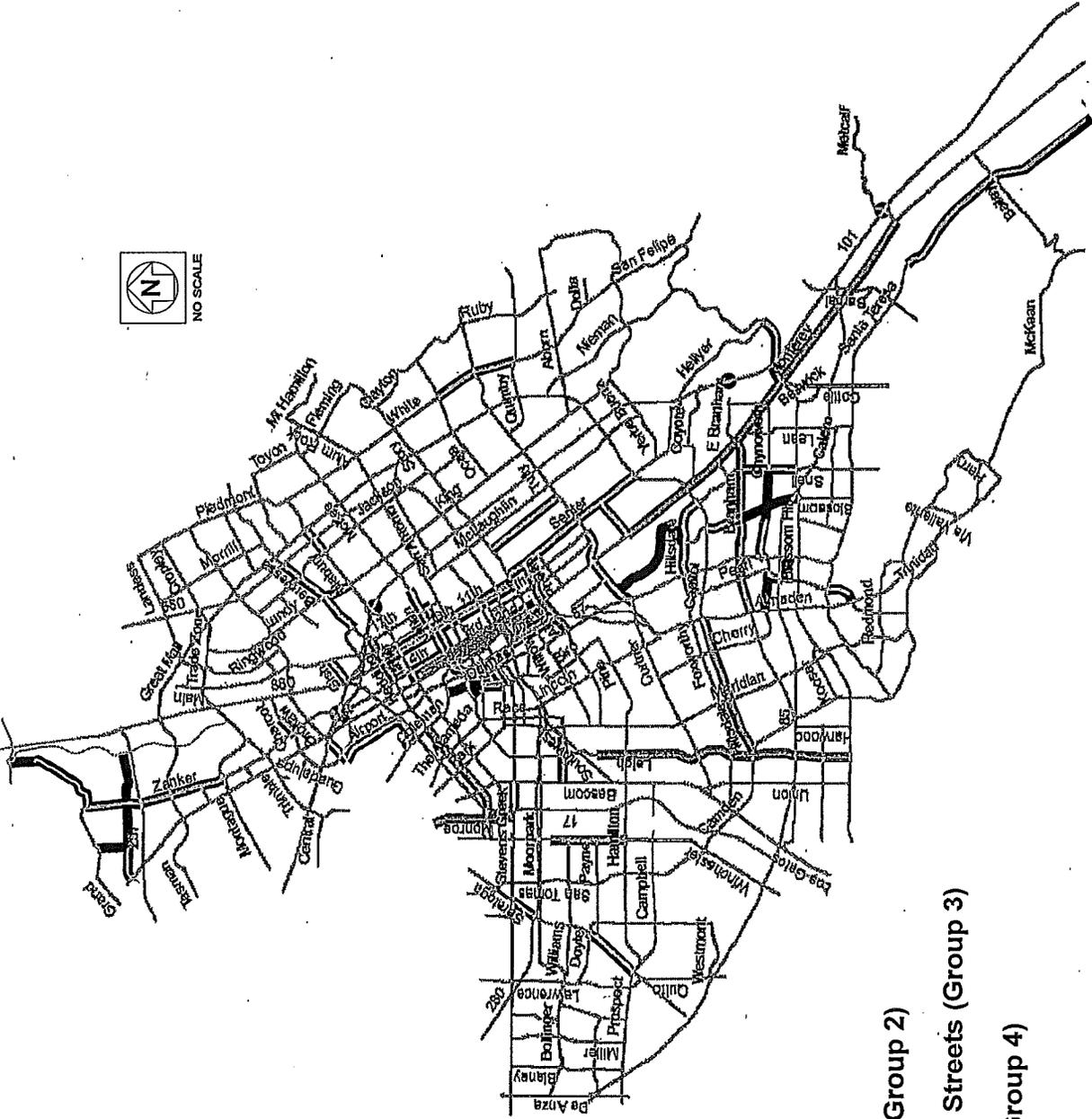
Proposed Changes to Current General Plan Street Network

June 2009

Group 4 Actions - Expand Street Capacity

#	Street	From	To	Lanes		Comments
				GP2020	Existing	
116	101/Mabury Interchange	--	--	IC	--	IC North San Jose Plan
117	101/Zanker Interchange	--	--	IC	--	IC North San Jose Plan
118	Autumn	Coleman	Park	4	0/2	4 Downtown Strategy Plan
119	Berryessa	Commercial	1680	6	4/6	6 Berryessa BART Station Area
120	Charcot	Junction	Zanker	4	2	4 North San Jose Plan
121	Chynoweth/Thornwood	Almaden	Winfield	4	0	4 Almaden/Blossom Hill Area
122	Communications Hill	Curtner	Hillsdale	4	0	4 Communications Hill Plan
123	Curtner	SR87	Monterey	6	4	6 Communications Hill Plan
124	Gish	1880	Oakland	4	2	4 North San Jose Area
125	Hillsdale	Capitol	Pearl	4	2/4	4 Communications Hill Area
126	King	Mabury	Berryessa	4	2/4	4
127	Lucretia	Story	Tully	4	2/4	4
128	Mabury	Jackson	Capitol	4	2/4	4
129	Nortech Pkwy	1st	McCarthy Blvd	--	0/2/4	4 Alviso Area
130	San Carlos	1880	Bascom	6	4	6 880/Stevens Creek Area
131	Santa Teresa	Bayliss	Laguna	6	2/4	6 Coyote Valley Area
132	Santa Teresa	Laguna	City boundary	4	2	4 Coyote Valley Area
133	Saratoga	Doyle	Campbell	6	4/6	6
134	Saratoga	1280	Stevens Creek	6	5/6	6
135	Senter	Capitol	Story	6	4/6	6
136	Silver Creek Valley/Blossom Hill	Hellyer	Monterey	6	4/6	6 Edenvale Area
137	Skyport	1st	4th	--	0	6 North San Jose Plan
138	Snell	Blossom Hill	Branham	6	4	6
139	Tully	Monterey	Tenth	6	4/5	6
140	Umbarger	Monterey	Senter	4	2	4 County Fairground Area
141	unnamed street in Alviso	Nortech Pkwy	Los Estreos Rd	--	0	2 Alviso Area
142	White	Marten	Quimby	6	5/6	6 Evergreen Area
143	Zanker	SR237	Montague	6	4/6	6 North San Jose Plan
144	Zanker	SR237	Dixon Landing	2	0/2	4 Alviso Area

Envision 2040 – Preliminary Street Network



Legend

- Reconfirm Recent Policy (Group 2)
- Accommodate Multimodal Streets (Group 3)
- Expand Street Capacity (Group 4)

June 17, 2009

Mr. Bijan Sartipi, District 4 Director
California Department Transportation
111 Grand Avenue
Oakland, CA 94612

Dear Mr. Sartipi:

SUBJECT: STATE ROUTE RELINQUISHMENTS IN SAN JOSE

The purpose of this letter is to reinitiate and engage Caltrans in the relinquishment of the following three segments of local State Routes from Caltrans to the City of San Jose:

- Route 82 from I-880 to I-280 (The Alameda Corridor/Downtown San Jose Area) – 3 Miles
- Route 82 from I-280 to US 101/Blossom Hill (Monterey Highway Corridor) – 7 Miles
- Route 130 from US 101 to I-680 or City Limit (Alum Rock Corridor) – 1.5 Miles

In 2007, the City and Caltrans exchanged letters discussing the relinquishment of State Routes (SR) 82 and 130. Summarizing this correspondence, on June 11, 2007, the City provided you with a letter expressing an interest in the relinquishment of these routes. Subsequently, in your letter of August 30, 2007, Caltrans had provided a response indicating that these routes had been evaluated and determined to have potential to be relinquished.

As also discussed in your letter, it was proposed that Caltrans would initiate the negotiation with the City, to include the development of a mutually agreed upon cost to relinquish the discussed segments in a "state of good repair". However, in discussions with your staff we understand that Caltrans is not considering any financial contribution toward the relinquishment of these segments of the State Route system. From the City's perspective, Caltrans stands to gain significant short- and long-term benefits from the relinquishment of approximately 11.5 miles of local State Routes. Given that these benefits can largely be quantified through reduced obligations related to operations, maintenance, liability and local permit coordination, it is requested that Caltrans' staff position be reconsidered through your office.

To further your understanding, the City's interest in the relinquishment considers the consolidation of jurisdiction to a single agency along these segments of the State Route system. The intent is to better manage, integrate and streamline the land use and right of way decision-making process associated with a number of local and regionally significant developments along these segments. While the benefits of relinquishment to the City will be recognized more in the long-term, the current condition of the infrastructure in many areas along these segments are in poor or sub-standard condition and will warrant rehabilitation in the near-term. As such, in consideration of what appears to be a mutually beneficial

Mr. Bijan Sartipi
SUBJECT: State Route Relinquishments in San Jose
June 17, 2009
Page 2

arrangement, we request Caltrans remain open to financially participating through the relinquishment process.

For your further information, the relinquishment of the three State Route segments in San Jose has generated interest from a variety of stakeholders seeking to redesign portions of the streets. Specific examples are listed below:

- As part of the Grand Boulevard Initiative, The Alameda Business District area of SR 82 is being planned for an enhanced streetscape to create a more attractive and pedestrian-friendly environment.
- In the Diridon Transit Station area, SR 82 is planned to be reconfigured to support development of a proposed baseball stadium and other transit and pedestrian oriented development.
- For the California High Speed Rail project, segments of Monterey Highway (SR 82) are planned to be narrowed from 6-lanes to 4-lanes to provide a cost effective right-of-way corridor for high-speed trains.
- Along Alum Rock Avenue (SR 130), the Santa Clara Valley Transportation Authority (VTA) is planning a bus rapid transit project with an exclusive busway in the median and a pedestrian oriented streetscape.

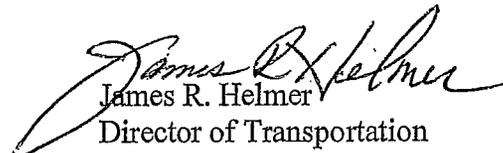
As a first step toward facilitating each of the above projects, we would like to formally establish that the City of San Jose has "design authority" for improvements along the State Route segments proposed for relinquishment.

In summary, San Jose would like to resolve with Caltrans the key business terms for a relinquishment agreement that addresses: 1) the limits of street segments to be relinquished, 2) design authority for planned improvements, 3) and a "fair share" financial contribution to upgrade streets to a "state of good repair". We recognize that current economic conditions make it challenging to allocate funds; therefore we are amenable to an agreement that commits to relinquishment in the near-term, but provides for State funding for improvements in the future.

For each of the proposed relinquishment segments, efforts are underway or will be starting soon to quantify the scope and cost of improvement needed along the local State Routes to bring the facilities to a "state of good repair".

We appreciate your attention to this matter and look forward to our continued collaboration.

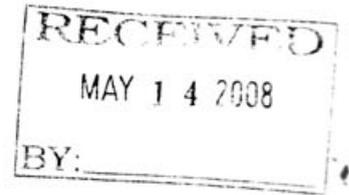
Sincerely,


James R. Helmer
Director of Transportation

c: Gene Gonzalo, Caltrans
John Ristow, VTA
Dan Leavitt, CHSRA

APPENDIX C

UNION PACIFIC RAILROAD LETTERS



May 13, 2008

Mr. Mehdi Morshed
Executive Director
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento, California 95814

Re: California High Speed Rail Route

Dear Mr. Morshed:

Reference is made to our meeting of May 9, 2008, to discuss the current status of the California high-speed rail initiative and its possible impacts on Union Pacific Railroad.

It was a very informative meeting to hear the efforts you are undertaking as the high-speed train bond measure is being prepared for the November, 2008 ballot.

After hearing your plans regarding the proposed routing for this service, Union Pacific feels it is important for the California High Speed Rail Authority (CHSA) to once again understand Union Pacific's position as related to potential alignments along Union Pacific corridors. Union Pacific has carefully evaluated CHSA's project and for the variety of reasons we discussed during our meeting, does not feel it is Union Pacific's best interest to have any proposed alignment located on Union Pacific rights-of way. Therefore, as your project moves forward with its final design, it is our request you do so in such a way as to not require the use of Union Pacific operating rights-of-way or interfere with Union Pacific operations. The State of California and the nation need railroads to retain their future ability to meet growing demand for rail cargo transportation, or that cargo will be in trucks on the highways.

Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerry Wilmoth".

Cc: Scott Moore - UP
Wesley Lujan - UP

Jerry Wilmoth
General Manager Network Infrastructure

UNION PACIFIC RAILROAD
10031 Foothills Blvd., Roseville, CA 95747
ph. (916) 789-6360 fx. (916) 789-6171

E000027



Scott D. Moore
Vice President Public Affairs

July 7, 2008

Mr. Quentin L. Kopp
Chairperson
California High-Speed Rail Authority Board
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Final Bay Area to Central Valley HST Program EIR/EIS

Dear Chairperson Kopp:

Union Pacific Railroad Company (UPRR) appreciates the opportunity to provide the following comments to the High-Speed Rail Board with respect to the above-referenced EIR/EIS.

UPRR wishes to emphasize that we are not opposed to the concept of high-speed rail nor would we oppose implementation of the project should the voters approve the bond issue in November. Our concern is that the project should not be designed to utilize or occupy any of our rights of way. Our rights of way are limited in width and are fully dedicated to freight service, and, in some instances, to commuter passenger trains. UPRR simply cannot meet the future freight transportation needs of California if our right of way is taken away for high-speed rail.

To respond to the specific corridors proposals for high-speed rail, UPRR points out that our San Jose to Gilroy right of way is very narrow by railroad standards – primarily 60-feet or less – and is bounded on one side by a major arterial highway. We could not give up a 50-foot exclusive width right of way to high-speed rail and remain in business.

Even though our right of way is wider (primarily 100-feet) along most of the Central Valley line, a loss of 50 feet would render future freight rail expansion impossible. As fuel prices rise and the nation becomes more concerned with the environmental effects of transportation, we need the ability to expand our infrastructure, perhaps substantially. In addition, we serve numerous industries on both sides of our track. High-speed rail would cut off, forever, our ability to expand capacity in the Central Valley, leaving California with only highway alternatives. It also would disrupt existing rail-served businesses and prevent new rail-served industries from locating on one or both sides of our rail line. This is not a wise transportation decision for the State.

Regarding Caltrain's San Francisco – San Jose corridor, UPRR does not own the right of way but has a freight easement over Caltrain's tracks. Our freight operations already are restricted to avoid delaying Caltrain's commuter trains. Imposing two exclusive high-speed rail tracks on a 50-foot right of way effectively will end our ability to provide freight service to customers on this corridor, including the Port of San Francisco. We will have the same concerns between Sylmar and Los Angeles, where Metrolink's commuter line right of way is designated for high-speed rail service.

An effective and efficient freight rail network is vital to California's economic future. Policy makers such as the high-speed rail board should not jeopardize UPRR's ability to provide such freight service by assuming that high-speed rail will have no impact. UPRR urges the board to carefully consider corridor routes that do not utilize our rights of way.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott D. Moore", written over a horizontal line.

Scott D. Moore

cc: Mehdi Morshed, California High-Speed Rail Authority
Jerry Wilmoth, Union Pacific Railroad
Wesley Lujan, Union Pacific Railroad



Jerry Wilmoth
General Manager Network Infrastructure

February 23, 2009



California High-Speed Rail Authority
Attn: San Francisco to San Jose HST Project EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Union Pacific Railroad Scoping Comments For Joint EIR/EIS

Dear High-Speed Rail Authority:

Union Pacific Railroad Company submits the following comments in response to the High-Speed Rail Authority's (Authority) Notice of Preparation pursuant to CEQA dated January 8, 2009, concerning the Project Environmental Impact Report/Environmental Impact Statement for the San Francisco to San Jose segment of the high-speed train system (HSR). These comments also respond to the Notice of Intent pursuant to NEPA published by the Federal Railroad Administration in the Federal Register on December 29, 2008. Union Pacific understands that the Authority and the FRA will jointly prepare the EIR/EIS for this project.

Union Pacific Railroad Company (Union Pacific) is a Delaware corporation that owns and operates a common carrier railroad network in the western half of the United States, including the State of California. Specifically, Union Pacific owns and operates rail main lines connecting the San Francisco Bay Area to Sacramento and points east and north, and to Los Angeles and points east and southeast. Union Pacific is the largest rail carrier in California in terms of both mileage and train operations. Union Pacific's rail network in the Bay Area is vital to the economic health of California and the nation as a whole. Union Pacific's rail service to customers in the Bay Area is crucial to the future success and growth of those customers.

Union Pacific previously submitted comments on the Bay Area to Central Valley HST Program EIR/EIS by letter dated July 7, 2008, from Mr. Scott Moore to Mr. Quentin L. Kopp of the Authority's Board (copy attached). Union Pacific reaffirms these comments and hereby incorporates them within this letter. By letter dated May 13, 2008, to Mr. Mehdi Morshed, the Authority's Executive Director (copy attached), the undersigned stated that it was not in Union Pacific's best interests to permit any proposed high-speed rail alignment on our rights of way. This remains Union Pacific's position on this matter.

Union Pacific submits the following comments with reference to the scoping of the joint EIR/EIS for the San Francisco to San Jose segment of the light rail system.

- 1) Union Pacific formerly owned and operated the Caltrain (PCJPB) right of way between San Francisco and San Jose that is proposed for the HSR system. Union Pacific sold the right of way to PCJPB in 1991 and retained a permanent and exclusive easement for the operation of freight trains and for the delivery of common carrier rail service over the entire line. Union Pacific also retained all rights and obligations relating to intercity passenger service provided by Amtrak or any other operator, at Union Pacific's sole election, operating over this line (currently no Amtrak or intercity passenger service trains operate over this right of way except between San Jose and Santa Clara). Union Pacific's permanent easement for freight and Amtrak service over this line is a valuable property and operational right that must not be impaired by construction and operation of the HSR. The Authority must protect such rights and mitigate all adverse impacts to Union Pacific's satisfaction.

- 2) In addition to retention of the easement rights outlined above, Union Pacific entered into an operating contract with the PCJPB at the time of sale setting forth Union Pacific's rights with respect to freight services on the line. Union Pacific has notified the PCJPB that it expects the PCJPB to protect Union Pacific's rights under this contract in any arrangement that might be made with HSR. The Authority must be aware of and protect Union Pacific's rights under this contract as well. All adverse impacts must be mitigated to Union Pacific's satisfaction.
- 3) As a common carrier railroad, Union Pacific is subject to the requirements of federal law governing abandonment or discontinuance of freight operations. Specifically, the Interstate Commerce Commission Termination Act (49 USC §10501 et seq.) prohibits a railroad from abandoning or discontinuing freight services over main or branch lines of railroad without authority from the federal Surface Transportation Board (STB). In the sale of the PCJPB right of way, Union Pacific retained all common carrier freight service rights and obligations. Therefore, Union Pacific's operations over the San Francisco – San Jose line are subject to STB jurisdiction. Neither the PCJPB nor the Authority may take any action that effectively requires or causes Union Pacific to abandon or discontinue freight service unless prior authority from the STB has been obtained. Union Pacific will deem any attempt by HSR to interfere with Union Pacific's property and contract rights on the San Francisco to San Jose line as an attempt to force a de facto abandonment of freight service in violation of federal law.
- 4) Union Pacific currently operates freight trains over the PCJPB right of way from San Jose to the Quint St. lead in San Francisco. The Quint St. lead diverges from the main line immediately north of Tunnel 3, near Jerrold St. Union Pacific's right to operate freight trains over the PCJPB extends to the entire width of the right of way over all available trackage. Union Pacific freight operations must not be adversely impacted by construction or operation of the HSR. All significant impacts must be mitigated to Union Pacific's satisfaction.
- 5) Union Pacific currently serves the Port of San Francisco via the Quint St. lead track. The port has advised Union Pacific that it intends to continue existing rail freight services and to encourage future growth in rail freight to and from Piers 80-96. Union Pacific is informed and believes that the port intends to enter into arrangements with tenants and pier operators that will cause future growth in rail operations. Union Pacific has means of serving the port other than via the Quint St. lead. The Authority must not undertake any action that interferes with freight operations via the tunnels and the Quint St. lead without mitigation of all significant impacts and prior approval from Union Pacific and the port.
- 6) Union Pacific currently serves a number of customers at or near the Port of Redwood City via the Redwood Jct. lead track. These customers, including Granite Rock and the port, have advised Union Pacific that they intend to continue all existing rail freight services and likely will demand additional freight services in the future. Union Pacific has no means of serving the port and the adjacent customers except via the PCJPB main line and the Redwood Jct. lead track. The Authority must not undertake any action that interferes with operations via this lead track without prior approval from Union Pacific, the port and the customers at this location.
- 7) Union Pacific currently serves a number of customers at other locations on the PCJPB San Francisco to San Jose line, including Granite Rock at South San Francisco. The existing yard at South San Francisco is crucial to Union Pacific's ability to provide

- freight service to the Port of San Francisco and to Granite Rock and other customers adjacent to the yard. The Authority must not undertake any action that interferes with
- 8) operations at the yard and adjoining trackage without prior approval from Union Pacific, the port and the customers at this location.
 - 9) Union Pacific owns and has primary operating rights on Main Track No. 1 between Santa Clara (CP Coast) and Diridon Station (San Jose). This track currently is shared with Amtrak's Capitol Corridor and Coast Starlight services and with Altamont Commuter Express's Stockton – San Jose commuter service. Union Pacific's rights to this track are crucial to continued operation of these passenger services. Use of this track also is crucial to freight service on the line to San Francisco. Further, these rights support continued operation of freight service on the main line south of San Jose to Los Angeles. The Authority must not undertake any action that interferes with Union Pacific's ownership and operation of Main Track No. 1 without prior approval from Union Pacific and the commuter agencies identified above. All adverse impacts must be mitigated to Union Pacific's satisfaction.
 - 10) PCJPB owns the right of way south of Diridon Station to a point called Lick (approximately three miles south of the station). Union Pacific's rights with regard to Main Track No. 1 extend southward to Lick. All comments in (8) above are applicable to the Diridon – Lick portion.
 - 11) Union Pacific has complete ownership of and control over the railroad right of way from Lick to Gilroy (and southward to San Luis Obispo and Los Angeles (Moorpark)). The PCJPB and the Santa Clara Valley Transportation Authority have a contract right to operate up to ten commuter trains to and from Gilroy over Union Pacific's right of way. Neither agency has any ownership rights in this line and no contractual rights to allow third parties to use this line. Union Pacific has no intention of allowing or permitting the Authority to build or operate the HSR within Union Pacific's right of way southward of Lick. The Authority should take this into account as part of the EIR/EIS for the San Francisco – San Jose segment.
 - 12) The Authority must study the following matters as part of the EIR/EIS and all necessary mitigation measures must be implemented:
 - (i) Slow speed freight trains and high-speed trains are incompatible on the same tracks at any time, including cross-overs. Union Pacific requires overhead clearance of 23 feet 6 inches, which is higher than the Authority contemplates for its electrical system. The Authority must provide grade-separated cross-overs for freight trains at necessary locations. The Authority must not contemplate operation of freight trains on any HSR trackage at any time (and vice-versa). If necessary, completely separate freight trackage must be provided. HSR must comply with all applicable FRA regulations.
 - (ii) Mitigation measures for the HSR may include construction of new freight trackage for Union Pacific. Such trackage must meet Union Pacific's construction and operation standards, and must be compliant with FRA and California Public Utilities Commission applicable standards.
 - 13) The construction and operation of HSR in the San Francisco to San Jose right of way must not cause increased operating costs or operating inefficiencies for Union Pacific. The Authority must assume Union Pacific's liability exposure and risk arising from current and future freight operations in the same corridor as the HSR. The Authority should fully study means to indemnify and insure Union Pacific against all such liability or risk, including liability to HSR patrons.

February 23, 2009

Union Pacific is confident that its concerns listed herein will be fully addressed and mitigated by the Authority and FRA during the EIR/EIS process. Union Pacific is willing to meet with the Authority and FRA to discuss its concerns about high-speed rail operation and to better understand the Authority's intentions regarding use of Union Pacific rights of way. Following such meeting, Union Pacific will be glad to consider all future requests by the Authority for information, construction standards and mapping data.

Please direct all requests and correspondence to the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerry Wilhoit". The signature is written in a cursive style with a large, looping initial "J".

Enclosures (2)



Scott D. Moore
Vice President Public Affairs

July 7, 2008

Mr. Quentin L. Kopp
Chairperson
California High-Speed Rail Authority Board
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Final Bay Area to Central Valley HST Program EIR/EIS

Dear Chairperson Kopp:

Union Pacific Railroad Company (UPRR) appreciates the opportunity to provide the following comments to the High-Speed Rail Board with respect to the above-referenced EIR/EIS.

UPRR wishes to emphasize that we are not opposed to the concept of high-speed rail nor would we oppose implementation of the project should the voters approve the bond issue in November. Our concern is that the project should not be designed to utilize or occupy any of our rights of way. Our rights of way are limited in width and are fully dedicated to freight service, and, in some instances, to commuter passenger trains. UPRR simply cannot meet the future freight transportation needs of California if our right of way is taken away for high-speed rail.

To respond to the specific corridors proposals for high-speed rail, UPRR points out that our San Jose to Gilroy right of way is very narrow by railroad standards – primarily 60-feet or less – and is bounded on one side by a major arterial highway. We could not give up a 50-foot exclusive width right of way to high-speed rail and remain in business.

Even though our right of way is wider (primarily 100-feet) along most of the Central Valley line, a loss of 50 feet would render future freight rail expansion impossible. As fuel prices rise and the nation becomes more concerned with the environmental effects of transportation, we need the ability to expand our infrastructure, perhaps substantially. In addition, we serve numerous industries on both sides of our track. High-speed rail would cut off, forever, our ability to expand capacity in the Central Valley, leaving California with only highway alternatives. It also would disrupt existing rail-served businesses and prevent new rail-served industries from locating on one or both sides of our rail line. This is not a wise transportation decision for the State.

Regarding Caltrain's San Francisco – San Jose corridor, UPRR does not own the right of way but has a freight easement over Caltrain's tracks. Our freight operations already are restricted to avoid delaying Caltrain's commuter trains. Imposing two exclusive high-speed rail tracks on a 50-foot right of way effectively will end our ability to provide freight service to customers on this corridor, including the Port of San Francisco. We will have the same concerns between Sylmar and Los Angeles, where Metrolink's commuter line right of way is designated for high-speed rail service.

An effective and efficient freight rail network is vital to California's economic future. Policy makers such as the high-speed rail board should not jeopardize UPRR's ability to provide such freight service by assuming that high-speed rail will have no impact. UPRR urges the board to carefully consider corridor routes that do not utilize our rights of way.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott D. Moore", written over a horizontal line.

Scott D. Moore

cc: Mehdi Morshed, California High-Speed Rail Authority
Jerry Wilmoth, Union Pacific Railroad
Wesley Lujan, Union Pacific Railroad



May 13, 2008

Mr. Mehdi Morshed
Executive Director
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento, California 95814

Re: California High Speed Rail Route

Dear Mr. Morshed:

Reference is made to our meeting of May 9, 2008, to discuss the current status of the California high-speed rail initiative and its possible impacts on Union Pacific Railroad.

It was a very informative meeting to hear the efforts you are undertaking as the high-speed train bond measure is being prepared for the November, 2008 ballot.

After hearing your plans regarding the proposed routing for this service, Union Pacific feels it is important for the California High Speed Rail Authority (CHSA) to once again understand Union Pacific's position as related to potential alignments along Union Pacific corridors. Union Pacific has carefully evaluated CHSA's project and for the variety of reasons we discussed during our meeting, does not feel it is Union Pacific's best interest to have any proposed alignment located on Union Pacific rights-of way. Therefore, as your project moves forward with its final design, it is our request you do so in such a way as to not require the use of Union Pacific operating rights-of-way or interfere with Union Pacific operations. The State of California and the nation need railroads to retain their future ability to meet growing demand for rail cargo transportation, or that cargo will be in trucks on the highways.

Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jerry Wilmoth".

Cc: Scott Moore – UP
Wesley Lujan - UP

Jerry Wilmoth
General Manager Network Infrastructure

UNION PACIFIC RAILROAD
10031 Foothills Blvd., Roseville, CA 95747
ph. (916) 789-6360 fx. (916) 789-6171



April 8, 2009

California High-Speed Rail Authority
Dan Leavitt, Deputy Director
Attn: San Jose to Merced HST Project EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814



Re: Union Pacific Railroad Scoping Comments
For San Jose to Merced Joint EIR/EIS

Dear High-Speed Rail Authority:

Union Pacific Railroad Company submits the following comments in response to the High-Speed Rail Authority's (Authority) Notice of Preparation pursuant to CEQA dated February 23, 2009, concerning the Project Environmental Impact Report/Environmental Impact Statement for the San Jose to Merced segment of the high-speed train system (HSR). These comments also should be considered as responding to the Notice of Intent pursuant to NEPA as published by the Federal Railroad Administration in the Federal Register. Union Pacific understands that the Authority and the FRA will jointly prepare the EIR/EIS for this project.

Union Pacific Railroad Company (Union Pacific) is a Delaware corporation that owns and operates a common carrier railroad network in the western half of the United States, including the State of California. Specifically, Union Pacific owns and operates rail main lines connecting the San Francisco Bay Area to Sacramento and points east and north, and to Los Angeles and points east and southeast. Union Pacific is the largest rail carrier in California in terms of both mileage and train operations. Union Pacific's rail network in the Bay Area and the Central Valley is vital to the economic health of California and the nation as a whole. Union Pacific's rail service to customers in the Bay Area and Central Valley is crucial to the future success and growth of those customers.

Union Pacific previously submitted comments on the Bay Area to Central Valley HST Program EIR/EIS by letter dated July 7, 2008, from Mr. Scott Moore to Mr. Quentin L. Kopp of the Authority's Board (copy attached). Union Pacific reaffirms these comments and hereby incorporates them within this letter. By letter dated May 13, 2008, to Mr. Mehdi Morshed, the Authority's Executive Director (copy attached), the undersigned stated that it was not in Union Pacific's best interests to permit any proposed high-speed rail alignment on our rights of way. Union Pacific's position on this matter remains the same.

Union Pacific submits the following comments with reference to the scoping of the joint EIR/EIS for the San Jose to Merced segment of the high-speed rail system.

Comments Applicable to San Jose to Gilroy Segment

- 1) Union Pacific formerly owned and controlled operations on the Caltrain (PCJPB) right of way between San Jose and a station named Lick (approximately 4.5 miles south of San Jose Diridon Station), which right of way is proposed for use by the HSR system. Union Pacific sold this right of way (and the right of way north of San Jose to San Francisco) to PCJPB in 1991 and retained a permanent and exclusive easement for the operation of freight trains and intercity passenger trains over the entire line. Union Pacific owns and has primary operating rights on Main Track No. 1 between Santa Clara (CP Coast) and Lick station. Between San Jose and Santa Clara, this track currently is shared with Amtrak's Capitol Corridor service and with Altamont Commuter Express's Stockton – San Jose commuter service. Between Lick and Santa Clara, this track also is shared with Amtrak's Coast Starlight, a long distance passenger train running between Los Angeles and Seattle, and with the PCJPB-VTA commuter trains to and from Gilroy (see section (3) below). Union Pacific's rights to Main Track No. 1 are crucial to effective operation of these passenger services. Such rights also are crucial to freight service on the line between Los Angeles and Oakland and to San Francisco. The Authority must not undertake any action that interferes with Union Pacific's ownership and operation of Main Track No. 1 without prior approval from Union Pacific, Amtrak and the commuter agencies identified above. All adverse impacts must be mitigated to Union Pacific's satisfaction.
- 2) The comments submitted by Union Pacific in its San Francisco to San Jose scoping letter dated February 20, 2009, and in the amendment letter dated March 13, 2009, copies attached hereto, are relevant with respect to the San Jose to Lick segment of the HSR project, and are incorporated herein.
- 3) Union Pacific owns outright in fee simple the entire width of the railroad right of way from Lick to Gilroy (and southward to San Luis Obispo and Los Angeles (Moorpark)). Amtrak's Coast Starlight operates over this line, and the PCJPB and the Santa Clara Valley Transportation Authority (VTA) have certain limited contract rights to operate up to ten round-trip commuter trains to and from Gilroy over Union Pacific's right of way. Neither agency has any ownership rights in this line and neither has any right or authority to allow third parties such as HSR to use or occupy this line. Union Pacific alone has such right. As previously advised, Union Pacific has no intention of allowing or permitting the Authority to build or operate the HSR within Union Pacific's right of way between Lick and Gilroy.
- 4) The Lick – Gilroy right of way (31 miles) owned by Union Pacific is, with few exceptions, only 60-foot wide. For much of this distance, the right of way is directly bordered by Monterey Road or other public highways. There are two main tracks from Lick to Coyote (12 miles), and the Santa Clara Valley

Transportation Authority (VTA) currently is adding 8.4 miles of second main track south of Coyote. With over twenty miles of the right of way occupied by two main tracks, there is no space available for any additional rail operations, including HSR. Union Pacific intends to preserve the remaining non-double track portions for future freight service expansion. Union Pacific will take all legal action required to protect its property and operations against threats to such future capacity, including attempts to take the property by eminent domain.

- 5) The Authority must be aware of the following matters as it prepares the EIR/EIS:
- a. Slow speed freight trains and high-speed trains are incompatible on the same tracks at any time and at any location, including at-grade cross-overs. Union Pacific requires overhead clearance of 23 feet 6 inches, which is higher than the Authority contemplates for its electrical system. The Authority must provide grade-separated cross-overs for freight trains at necessary locations. The Authority must not contemplate operation of freight trains on any HSR trackage at any time (and vice-versa). If necessary, completely separate freight trackage must be provided. HSR must comply with all applicable FRA regulations with regard to freight trackage.
 - b. Given the constraints of the right of way between Lick and Gilroy, it is not possible or practical to share that right of way with HSR. There are no mitigation measures which will make this possible. Union Pacific will not voluntarily make this right of way available to HSR under any circumstances.
- 6) As a common carrier railroad, Union Pacific is subject to the requirements of federal law governing abandonment or discontinuance of freight operations. Specifically, the Interstate Commerce Commission Termination Act (49 USC §10501 et seq.) prohibits a railroad from abandoning or discontinuing freight services over main or branch lines of railroad without authority from the federal Surface Transportation Board (STB). In the sale of the PCJPB right of way, Union Pacific retained all common carrier freight service rights and obligations. Therefore, Union Pacific's operations over the San Jose – Lick – Gilroy line are subject to STB jurisdiction. Neither the PCJPB nor the Authority may take any action that effectively requires or causes Union Pacific to abandon or discontinue freight service on or over such line without prior authority from the STB. Union Pacific will deem any attempt by HSR to interfere with Union Pacific's property and contract rights on the San Jose to Gilroy line, including attempts to seize the line by the exercise of eminent domain, as an attempt to force a de facto abandonment of freight service in violation of federal law.

Comments Applicable to Gilroy – Chowchilla Segment

Union Pacific has no scoping comments with reference to this segment as no Union Pacific right of way or operations are involved.

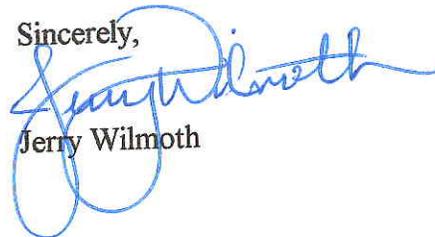
Comments Applicable to Chowchilla – Merced Segment

The map attached to the Notice of Preparation (Figure 1) indicates that Union Pacific's main line right of way would be utilized by HSR northward from Chowchilla (Henry Miller Road) to Merced, and possibly southward to Fresno. Union Pacific's scoping comments with reference to the Notice of Preparation for the Bakersfield – Merced segment, filed simultaneously with the Authority, are applicable to the Chowchilla – Merced – Fresno segment here. Both segments may occupy portions of Union Pacific's Fresno Subdivision main line. Therefore, Union Pacific's scoping comments for the Bakersfield – Merced segment are applicable hereto and are incorporated herein by reference.

Union Pacific is confident that its concerns listed herein will be fully addressed by the Authority and FRA during the EIR/EIS process. Union Pacific is willing to meet with the Authority and FRA to discuss its concerns about high-speed rail operation and to better understand the Authority's intentions regarding use of Union Pacific rights of way. Following such meeting, Union Pacific will be glad to consider all future requests by the Authority for information concerning operations, construction standards and mapping data.

Please direct all requests and correspondence to the undersigned.

Sincerely,



Jerry Wilmoth

Kris Livingston

From: JWILMOTH@up.com
Sent: Monday, November 23, 2009 3:10 PM
To: HSR Comments
Subject: Altamont Corridor Rail Project EIR/EIS
Attachments: pic17807.gif; 20091123145847228.pdf

Union Pacific comments attached. Hard copy being mailed today.

----- Forwarded by Jerry Wilmoth/UPC on 11/23/2009 03:08 PM -----

IW21049@up.com

To "Wilmoth, Jerry" <jwilmoth@up.com>

11/23/2009 02:58
PM

cc

Subject

This E-mail was sent from "PR083F0D" (Aficio MP C2800).

Scan Date: 11.23.2009 14:58:47 (-0500)

Queries to: IW21049@up.com (*See attached file: 20091123145847228.pdf*)

**

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**



Jerry Wilmoth
General Manager Network Infrastructure

November 23, 2009

Mr. Dan Leavitt - Deputy Director
California High-Speed Rail Authority
Attn: Altamont Pass Rail Project EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Union Pacific Railroad Scoping Comments
For the Altamont Pass Rail Project EIR/EIS – Due December 4, 2009

Dear High-Speed Rail Authority:

Union Pacific Railroad Company submits the following comments in response to the High-Speed Rail Authority's (Authority) Notice of Preparation pursuant to CEQA dated October 22, 2009, concerning the Altamont Pass Rail Project proposed by the Authority jointly with the San Joaquin Regional Rail Commission (SJRRC) from Stockton to San Jose via the Altamont Pass. These comments also should be considered as responding to the Notice of Intent pursuant to NEPA as published by the Federal Railroad Administration (FRA) in the Federal Register. Union Pacific understands that the Authority and the FRA will jointly prepare the EIR/EIS for this project.

Union Pacific Railroad Company (Union Pacific) is a Delaware corporation that owns and operates a common carrier railroad network in the western half of the United States, including the State of California. Specifically, Union Pacific owns and operates rail main lines connecting the Stockton – Tracy area with San Jose and other Bay Area points. These rail lines connect with other Union Pacific lines running east and north and with lines to Los Angeles and points east and southeast. Union Pacific is the largest rail carrier in California in terms of both mileage and train operations. Union Pacific's rail network in the Stockton – San Jose – Oakland area and in the Central Valley is vital to the economic health of California and the nation as a whole. Union Pacific rail service to customers in the Bay Area, Central Valley, Stockton, Tracy, Sacramento, Modesto and other major cities is crucial to the future success and growth of those areas and customers.

Union Pacific previously submitted comments on the Bay Area to Central Valley HST Program EIR/EIS by letter dated July 7, 2008, from Mr. Scott Moore to Mr. Quentin L. Kopp of the Authority's Board (copy attached). Union Pacific reaffirms these comments and hereby incorporates them within this letter. By letter dated May 13, 2008, to Mr. Mehdi Morshed, the Authority's Executive Director (copy attached), the undersigned stated that it was not in Union Pacific's best interests to permit any proposed high-speed rail alignment on our rights of way. Union Pacific's position on this matter remains the same.

Union Pacific submits the following comments with reference to the scoping of the joint Altamont Pass Rail Project EIR/EIS for the Stockton to San Jose corridor. These comments are submitted on the assumption that the project corridor via Altamont Pass to San Jose may encroach on or otherwise impact Union Pacific's rights of way which are used as freight and passenger routes . Union Pacific has not seen detailed right of way maps for this corridor project nor has Union Pacific been advised by the Authority as to the definitive route selected for the corridor between Stockton, Tracy and San Jose. Union Pacific must therefore assume, for purposes of these scoping comments, that some or all of its right of way is proposed for use by regional rail commuter trains and ultimately by high-speed rail trains.

With respect to such use, the Authority is advised as follows:

1. Union Pacific owns the following rights of way which may be impacted by the proposed rail corridor development:
 - a) the Oakland Subdivision main line from Fremont (Niles Jct.) to Stockton, comprising the former Western Pacific main line over Altamont Pass.
 - b) the Fresno Subdivision main line from Stockton to Lathrop, comprising the former Southern Pacific main line between these locations.
 - c) the Tracy Subdivision main line from Lathrop to Tracy, comprising a portion of the former Southern Pacific main line across Altamont Pass. The SP main line from Tracy to Fremont (Niles Jct.) over Altamont Pass has been abandoned and conveyed to third parties. The balance of the Tracy Subdivision now extends to Martinez via the line known as the Mococo Line.
 - d) the Niles Subdivision main line from Fremont (Niles Jct.) to Newark.
 - e) the Coast Subdivision main line from Newark to San Jose.
 - f) the Warm Springs Subdivision from Fremont (Niles Jct.) to San Jose.

All of these subdivisions are critically important to Union Pacific for the operation of freight service to and from the Bay Area. BNSF also has certain trackage rights on some of these subdivisions for its own freight operations.

2. SJRRC operates commuter passenger trains under agreement with Union Pacific from Stockton to San Jose over the Fresno, Oakland, Niles and Coast subdivisions. Amtrak and Capitol Corridor operate regional passenger trains over the Niles and Coast Subdivisions, and Amtrak operates the long distance Coast Starlight over the Coast Subdivision.
3. Union Pacific controls the operation and maintenance of these subdivisions. No other carrier or government agency has the right to permit other railroads or rail operators to use any part of these rights of way. These main lines are all CTC-dispatched and consist mainly of single track with small sections of double track. The majority of these rights of way are 100-feet in width, with limited wider zones in towns and cities for station grounds.

4. Major rail shippers are located along these subdivisions. In many instances, these shippers have constructed large unloading and storage facilities. These facilities are immediately adjacent to the right of way, generally on the side away from paralleling highways. Corridor alignment on or adjacent to these subdivisions potentially would terminate Union Pacific's ability to serve some or all of these shippers, or future shippers needing rail service, leading to serious economic loss to shippers, consumers, the state and the railroad

Confirming Union Pacific's prior statements, both written and oral, we will not make any segments or any parts of these subdivisions available for the proposed regional commuter rail corridor or the potential future high-speed rail alignment under any circumstances. Preparation of the Project EIR/EIS should recognize this limitation on available right of way.

As a common carrier railroad, Union Pacific is subject to federal law governing abandonment or discontinuance of freight operations. Specifically, the Interstate Commerce Commission Termination Act (49 USC §10501 et seq.) prohibits a railroad from abandoning or discontinuing freight services over main or branch lines of railroad without authority from the federal Surface Transportation Board (STB). Union Pacific's operation over these subdivisions is subject to STB jurisdiction. The Authority may not undertake any action that effectively requires or causes Union Pacific to abandon or discontinue freight service on or over any portion of these subdivisions unless prior authority from the STB has been obtained. Union Pacific will deem any attempt by HSR to interfere with Union Pacific's operation over these subdivisions, including service to shippers, or to appropriate any part of its right of way by eminent domain, as an attempt to force a de facto abandonment of freight service in violation of federal law.

5. The Authority must be aware of the following matters as it prepares the EIR/EIS:
 - a) Slow speed freight trains and high-speed trains are incompatible on the same tracks at any time and at any location, including at-grade cross-overs. Union Pacific requires overhead clearance of 23 feet 6 inches. The Authority must provide grade-separated cross-overs for freight trains at necessary locations. The Authority must not contemplate operation of freight trains on any HSR trackage at any time (and vice-versa). HSR must comply with all applicable FRA regulations with regard to freight trackage.
 - b) Union Pacific does not believe it is possible or practical to devise any mitigation measures which will permit shared use of any part of these subdivisions for the types of passenger service contemplated by the EIR/EIS. As previously stated, Union Pacific will not voluntarily make these rights of way available to the corridor project under any circumstances. The Authority must not assume that even a small part of Union Pacific's rights of way will be available for the Altamont Rail Project.
 - c) Union Pacific is of the legal opinion that all of its operating right of way, including these subdivisions, is exempt from the state's eminent domain powers.

Union Pacific has read carefully the entire Notice of Preparation for the Altamont Rail Project and has noted many statements to the effect that freight operations and the type of passenger service envisioned by the EIR/EIS are entirely incompatible. Union Pacific concurs in the Authority's assessment in this regard and believes that the Authority actually has no current intention of attempting to take or use any part of our rights of way for passenger train service as contemplated by the EIR/EIS. Nonetheless, Union Pacific deems it prudent to reaffirm its position on joint operations as stated in this scoping letter.

As the Authority is fully aware, SJRRC operates a limited number of commuter passenger trains via the Fresno, Oakland, Niles and Coast subdivisions between Stockton and San Jose. At current freight and passenger train volumes, SJRRC's operations can be accommodated on these lines. However, Union Pacific cannot permit greater passenger train volumes over these subdivisions without extensive capacity improvements.

The Authority is also aware that Amtrak and the Capitol Corridor operate a large number of regional passenger trains between Oakland and San Jose via the Niles and Coast subdivisions. Union Pacific cannot accommodate any further passenger train operation over these subdivisions without extensive capacity improvements.

Accordingly, Union Pacific supports the Authority's intention to provide a new and completely separate rail passenger train corridor for future standard and high-speed rail passenger operation. This corridor must be reserved for rail passenger service without interference with, or use of, Union Pacific's freight main lines as identified herein.

Union Pacific applauds the Authority's recognition that freight main lines are inappropriate for both regional rail commuter service and high-speed trains.

Union Pacific is confident that its concerns listed herein will be fully addressed by the Authority and FRA during the EIR/EIS process. Union Pacific is willing to meet with the Authority and FRA to discuss its concerns about rail corridor operation and to better understand the Authority's intentions regarding potential impacts on Union Pacific rights of way. Following such meeting, Union Pacific will be glad to consider all future requests by the Authority for information concerning operations, construction standards and mapping data.

Please direct all requests and correspondence to the undersigned.

Sincerely,



Jerry S. Wilmoth
General Manager - Network Infrastructure

Attachments (2)



Scott D. Moore
Vice President Public Affairs

July 7, 2008

Mr. Quentin L. Kopp
Chairperson
California High-Speed Rail Authority Board
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Final Bay Area to Central Valley HST Program EIR/EIS

Dear Chairperson Kopp:

Union Pacific Railroad Company (UPRR) appreciates the opportunity to provide the following comments to the High-Speed Rail Board with respect to the above-referenced EIR/EIS.

UPRR wishes to emphasize that we are not opposed to the concept of high-speed rail nor would we oppose implementation of the project should the voters approve the bond issue in November. Our concern is that the project should not be designed to utilize or occupy any of our rights of way. Our rights of way are limited in width and are fully dedicated to freight service, and, in some instances, to commuter passenger trains. UPRR simply cannot meet the future freight transportation needs of California if our right of way is taken away for high-speed rail.

To respond to the specific corridors proposals for high-speed rail, UPRR points out that our San Jose to Gilroy right of way is very narrow by railroad standards – primarily 60-feet or less – and is bounded on one side by a major arterial highway. We could not give up a 50-foot exclusive width right of way to high-speed rail and remain in business.

Even though our right of way is wider (primarily 100-feet) along most of the Central Valley line, a loss of 50 feet would render future freight rail expansion impossible. As fuel prices rise and the nation becomes more concerned with the environmental effects of transportation, we need the ability to expand our infrastructure, perhaps substantially. In addition, we serve numerous industries on both sides of our track. High-speed rail would cut off, forever, our ability to expand capacity in the Central Valley, leaving California with only highway alternatives. It also would disrupt existing rail-served businesses and prevent new rail-served industries from locating on one or both sides of our rail line. This is not a wise transportation decision for the State.

Regarding Caltrain's San Francisco – San Jose corridor, UPRR does not own the right of way but has a freight easement over Caltrain's tracks. Our freight operations already are restricted to avoid delaying Caltrain's commuter trains. Imposing two exclusive high-speed rail tracks on a 50-foot right of way effectively will end our ability to provide freight service to customers on this corridor, including the Port of San Francisco. We will have the same concerns between Sylmar and Los Angeles, where Metrolink's commuter line right of way is designated for high-speed rail service.

An effective and efficient freight rail network is vital to California's economic future. Policy makers such as the high-speed rail board should not jeopardize UPRR's ability to provide such freight service by assuming that high-speed rail will have no impact. UPRR urges the board to carefully consider corridor routes that do not utilize our rights of way.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott D. Moore", written over a circular scribble.

Scott D. Moore

cc: Mehdi Morshed, California High-Speed Rail Authority
Jerry Wilmoth, Union Pacific Railroad
Wesley Lujan, Union Pacific Railroad



May 13, 2008

Mr. Mehdi Morshed
Executive Director
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento, California 95814

Re: California High Speed Rail Route

Dear Mr. Morshed:

Reference is made to our meeting of May 9, 2008, to discuss the current status of the California high-speed rail initiative and its possible impacts on Union Pacific Railroad.

It was a very informative meeting to hear the efforts you are undertaking as the high-speed train bond measure is being prepared for the November, 2008 ballot.

After hearing your plans regarding the proposed routing for this service, Union Pacific feels it is important for the California High Speed Rail Authority (CHSA) to once again understand Union Pacific's position as related to potential alignments along Union Pacific corridors. Union Pacific has carefully evaluated CHSA's project and for the variety of reasons we discussed during our meeting, does not feel it is Union Pacific's best interest to have any proposed alignment located on Union Pacific rights-of way. Therefore, as your project moves forward with its final design, it is our request you do so in such a way as to not require the use of Union Pacific operating rights-of-way or interfere with Union Pacific operations. The State of California and the nation need railroads to retain their future ability to meet growing demand for rail cargo transportation, or that cargo will be in trucks on the highways.

Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerry Wilmoth".

Cc: Scott Moore - UP
Wesley Lujan - UP

Jerry Wilmoth
General Manager Network Infrastructure

UNION PACIFIC RAILROAD
10031 Foothills Blvd., Roseville, CA 95747
ph. (916) 789-6360 fx. (916) 789-6171



April 8, 2009

California High-Speed Rail Authority
Dan Leavitt, Deputy Director
Attn: Merced to Bakersfield HST Project EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

**Re: Union Pacific Railroad Scoping Comments
For Merced to Bakersfield Joint EIR/EIS**

Dear High-Speed Rail Authority:

Union Pacific Railroad Company submits the following comments in response to the High-Speed Rail Authority's (Authority) Notice of Preparation pursuant to CEQA dated February 23, 2009, concerning the Project Environmental Impact Report/Environmental Impact Statement for the Merced to Bakersfield segment of the high-speed train system (HSR). These comments also should be considered as responding to the Notice of Intent pursuant to NEPA as published by the Federal Railroad Administration in the Federal Register. Union Pacific understands that the Authority and the FRA will jointly prepare the EIR/EIS for this project.

Union Pacific Railroad Company (Union Pacific) is a Delaware corporation that owns and operates a common carrier railroad network in the western half of the United States, including the State of California. Specifically, Union Pacific owns and operates rail main lines connecting the San Francisco Bay Area to Sacramento and points east and north, and to Los Angeles and points east and southeast. Union Pacific is the largest rail carrier in California in terms of both mileage and train operations. Union Pacific's rail network in the Bay Area and the Central Valley is vital to the economic health of California and the nation as a whole. Union Pacific's rail service to customers in the Bay Area and Central Valley is crucial to the future success and growth of those customers.

Union Pacific previously submitted comments on the Bay Area to Central Valley HST Program EIR/EIS by letter dated July 7, 2008, from Mr. Scott Moore to Mr. Quentin L. Kopp of the Authority's Board (copy attached). Union Pacific reaffirms these comments and hereby incorporates them within this letter. By letter dated May 13, 2008, to Mr. Mehdi Morshed, the Authority's Executive Director (copy attached), the undersigned stated that it was not in Union Pacific's best interests to permit any proposed high-speed rail alignment on our rights of way. Union Pacific's position on this matter remains the same.

Union Pacific submits the following comments with reference to the scoping of the joint EIR/EIS for the Merced to Bakersfield segment of the high-speed rail system. These comments are submitted on the assumption that Union Pacific's Fresno Subdivision main line is under study for the HSR alignment. To the extent that the preferred HSR alignment is within or adjacent to the

Burlington Northern Santa Fe Railway Company right of way along this segment, Union Pacific expresses no opinion and these comments would be inapplicable.

- 1) Union Pacific owns the Fresno Subdivision right of way in fee simple between Sacramento and Bakersfield. Union Pacific controls the operation and maintenance of this subdivision. No other carrier or government agency has the right to permit other railroads or rail operators to use any part of this right of way. This single track, CTC-dispatched main line serves the major cities of Stockton, Modesto, Turlock, Merced, Chowchilla, Madera, Fresno, Tulare and Bakersfield. Union Pacific understands, based on the Notices of Preparation for this segment and for the San Jose – Merced segment, that the Authority is considering Union Pacific's Fresno Subdivision for the HSR alignment between Merced, Madera and Fresno, in the central Fresno area, and potentially from Fresno to Bakersfield. Confirming Union Pacific's prior statements, both written and oral, we will not voluntarily make these or any part of the Fresno Subdivision available for the high-speed rail alignment.
- 2) For the majority of its length between Merced and Bakersfield, the Fresno Subdivision right of way is 100 feet in width, with limited wider zones in towns and cities for station grounds. At locations between cities where the right of way is wider, the outer portions generally have been given over to public highways or other utility uses. State Highway 99 closely parallels the Fresno Subdivision between Merced and Fresno, and between Kingsburg and Bakersfield.
- 3) Major rail shippers are located along the Fresno Subdivision. In many instances, these shippers have constructed large unloading and storage facilities, including facilities for feed, grain, and ethanol. These facilities are immediately adjacent to the right of way, generally on the side away from Highway 99. The HSR alignment on or adjacent to the Fresno Subdivision potentially would terminate Union Pacific's ability to serve these shippers, and future shippers needing rail service, leading to serious economic loss to shippers, consumers, the state and the railroad.
- 4) In the Fresno metropolitan area, Union Pacific owns and operates a major freight yard which is crucial to its ability to serve customers on the Fresno Subdivision. This yard, located in the northern part of the city, also serves as a consolidation point for freight shipments to and from regional and short line railroads such as the San Joaquin Valley Railroad. Loss of this consolidation point would be a serious obstacle to these smaller rail carriers. As a result, this yard is not available in whole or in part for the HSR alignment; it is reserved for present and future railroad operation. The right of way north and south of the Fresno Yard, traversing numerous city streets, is reserved for Union Pacific and regional carrier freight operations as well. Union Pacific does not intend voluntarily to make any part of its Fresno area right of way or yard available for the HSR alignment.

Union Pacific likewise is not interested in a consolidated rail corridor in Fresno with any other rail user.

- 5) As a common carrier railroad, Union Pacific is subject to federal law governing abandonment or discontinuance of freight operations. Specifically, the Interstate Commerce Commission Termination Act (49 USC §10501 et seq.) prohibits a railroad from abandoning or discontinuing freight services over main or branch lines of railroad without authority from the federal Surface Transportation Board (STB). Union Pacific's operations over the Fresno Subdivision main line are subject to STB jurisdiction. The Authority may not undertake any action that effectively requires or causes Union Pacific to abandon or discontinue freight service on or over any portion of the Fresno Subdivision unless prior authority from the STB has been obtained. Union Pacific will deem any attempt by HSR to interfere with Union Pacific's operation over the Fresno Subdivision, including service to shippers, or to appropriate any part of its right of way by eminent domain, as an attempt to force a de facto abandonment of freight service in violation of federal law.
- 6) The Authority must be aware of the following matters as it prepares the EIR/EIS:
 - a. Slow speed freight trains and high-speed trains are incompatible on the same tracks at any time and at any location, including at-grade cross-overs. Union Pacific requires overhead clearance of 23 feet 6 inches, which is higher than the Authority contemplates for its electrical system. The Authority must provide grade-separated cross-overs for freight trains at necessary locations. The Authority must not contemplate operation of freight trains on any HSR trackage at any time (and vice-versa). If necessary, completely separate freight trackage must be provided. HSR must comply with all applicable FRA regulations with regard to freight trackage.
 - b. Union Pacific does not believe it is possible or practical to devise any mitigation measures which will permit shared use of any part of the Fresno Subdivision right of way. Union Pacific will not voluntarily make this right of way available to HSR under any circumstances.

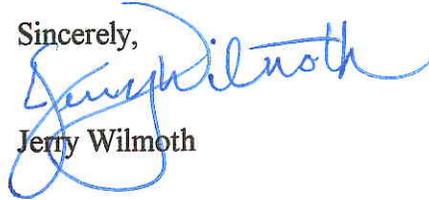
The map attached to the Notice of Preparation (Figure 1) for the San Jose – Merced segment of the HSR indicated that Union Pacific's main line right of way would be utilized by HSR northward from Chowchilla (Henry Miller Road) to Merced. Union Pacific's scoping comments herein are fully applicable to the Chowchilla – Merced segment.

Jerry Wilmoth
General Manager Network Infrastructure

Union Pacific is confident that its concerns listed herein will be fully addressed by the Authority and FRA during the EIR/EIS process. Union Pacific is willing to meet with the Authority and FRA to discuss its concerns about high-speed rail operation and to better understand the Authority's intentions regarding use of Union Pacific rights of way. Following such meeting, Union Pacific will be glad to consider all future requests by the Authority for information concerning operations, construction standards and mapping data.

Please direct all requests and correspondence to the undersigned.

Sincerely,



Jerry Wilmoth



Jerry Wilmoth
General Manager Network Infrastructure

February 25, 2010

California High-Speed Rail Authority
Dan Leavitt, Deputy Director
Attn: Merced to Sacramento HST Project EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Union Pacific Railroad Scoping Comments for Merced to Sacramento Joint EIR/EIS

Dear High-Speed Rail Authority:

Union Pacific Railroad Company appreciates the opportunity to provide the following comments in response to the High-Speed Rail Authority's (Authority) Notice of Preparation pursuant to CEQA dated December 23, 2009, concerning the Project Environmental Impact Report/Environmental Impact Statement for the Merced-to-Sacramento segment of the high-speed train system (HSR). These comments also respond to the Notice of Intent issued on the same date pursuant to NEPA, as published by the Federal Railroad Administration in the Federal Register. Union Pacific understands that the Authority and the FRA will prepare the joint EIR/EIS for this project.

Union Pacific previously submitted comments on the Bay Area-to-Central Valley HST Program EIR/EIS by letter dated July 7, 2008, from Mr. Scott Moore to Mr. Quentin L. Kopp of the Authority's Board (copy attached). Union Pacific reaffirms these comments and hereby incorporates them in this letter. By letter dated May 13, 2008, to Mr. Mehdi Morshed, the Authority's Executive Director (copy attached), I stated that it was not in Union Pacific's interests to permit any proposed high-speed rail alignment on our rights of way. Union Pacific's position has not changed.

Union Pacific Railroad Company (Union Pacific) is a Delaware corporation that owns and operates a common carrier rail network in the western half of the United States, including the State of California. Specifically, Union Pacific owns and operates main lines connecting the San Francisco Bay Area to Sacramento and points east and north, and to Los Angeles and points east and southeast. Union Pacific is the largest rail carrier in California in terms of both mileage and train operations. Union Pacific's rail network in the Bay Area and the Central Valley is vital to the economic health of California and the nation as a whole. Union Pacific's rail service to freight customers in the Bay Area and Central Valley is crucial to the future success and growth of freight customers, as well as regional and local economies.

Union Pacific understands, based on the Notices of Preparation, that the Authority is considering Union Pacific's Fresno Subdivision for the HSR alignment between Sacramento (Elvas) and Merced. Confirming Union Pacific's prior statements, both written and oral, we cannot make this or any part of the Fresno Subdivision right of way available for the high-speed rail alignment.

Union Pacific owns the Fresno Subdivision right of way in fee simple between Sacramento (at a point northeast of downtown Sacramento called Elvas) and Merced. The Fresno Subdivision in this area is a single-track, CTC-dispatched main line serving the major cities of Lodi, Stockton, Manteca, Modesto, Turlock, and Merced. Union Pacific controls operations and maintenance on this subdivision. BNSF also operates freight trains under a trackage rights agreement on this subdivision. Amtrak operates passenger trains on this subdivision between Sacramento and Stockton. The Altamont Commuter Express (ACE) operates commuter trains on this subdivision between Stockton and Lathrop. Only Union Pacific has the right to permit other railroads or rail operators such as these to use any part of this right of way.

For the majority of its length between Merced and Sacramento (Elvas), the Fresno Subdivision right of way is 100 feet in width, with limited wider zones in towns and cities for station grounds. Although the right of way has sometimes been wider between cities, the outer portions have been taken for public highways or utility uses in many locations. All remaining right of way is dedicated to current and future freight rail service and cannot be released for HSR construction.

Union Pacific submits the following specific comments for the scoping of HSR near our Merced-to-Sacramento tracks:

- 1) Many rail shippers are located along the Fresno Subdivision between Sacramento and Merced. Union Pacific has a federal obligation to serve existing shippers and new shippers who request service in the future. HSR cannot cut off these services. Grade separations will be required for rail tracks serving these shippers if the HSR alignment intersects them. As the Authority presumably agrees, at-grade rail-to-rail crossings between freight tracks and HSR would not be safe or acceptable.
- 2) Placing the HSR alignment at ground level adjacent to or near Union Pacific's right of way in areas where no shippers now operate would, in effect, create a rail "desert" that could never in the future be used to site a new, rail-served facility for any shipper. This is especially critical between Manteca and Merced, where U.S. Highway 99 has already cut off one side of Union Pacific's access to potential industrial shippers on one side. An HSR alignment closely paralleling Union Pacific's right of way on the side opposite U.S. 99 would forever prevent future rail-served industrial, agricultural, and logistics development between Merced and Manteca. Future industries in this corridor would have to be served by trucks using local roads, rather than rail.

Even where U.S. 99 is not adjacent to our tracks, the Authority must consider that an HSR alignment immediately next to or near the right of way will forever curtail economic development along that side of the corridor and deprive Union Pacific, its potential shippers, landowners, and cities and counties of valuable commercial opportunities. Such alignment will cause adjacent property owners to lose rail-related development opportunities and potentially to lose present or future market value.

The Authority must evaluate the economic losses and environmental impacts, including the losses to Union Pacific that result from limiting future rail-served development. The Authority should develop mitigation alternatives to limit such impacts by retaining the possibility for future rail-related development along the Fresno Subdivision. Union Pacific strongly urges the Authority to site the HSR alignment far enough from the railroad to permit future industrial development between the railroad and HSR without the need for grade-separated roadway and rail access. Alternatively, HSR could be placed on the opposite side of U.S. 99 from our railroad between Manteca and Merced.

- 3) In the Stockton metropolitan area, Union Pacific owns and operates a major railcar freight yard, which is crucial to our ability to serve customers on the Fresno Subdivision and on the main line over Altamont Pass. This yard, located in the southern part of the city, also serves as a consolidation point for freight shipments to and from branch lines, regional carriers and short line railroads. Further south, at Lathrop, Union Pacific owns and operates a major, rapidly growing intermodal terminal on the parallel Sacramento Subdivision serving the Central Valley and portions of the Bay Area. These facilities are crucial to the future economic development of the entire area and cannot be constrained by the HSR alignment. These facilities and all adjacent expansion property must be reserved for present and future railroad service.
- 4) In the Sacramento metropolitan area, Union Pacific's Martinez Subdivision right of way connects Elvas and the Sacramento Valley Station about 3 miles to the west. The Martinez Subdivision also connects to the Sacramento Subdivision at Haggin, at the middle of this segment. Union Pacific, BNSF, and Caltrans use the Martinez Subdivision as the principle freight and passenger route through the Central Corridor between the Midwest and the Bay Area.

Currently, there is a major project at the Sacramento Valley Station to realign Union Pacific's tracks and relocate the current passenger platforms and related facilities. Any HSR use of Union Pacific's Martinez Subdivision right of way at grade or aerially would unduly constrain Union Pacific's service, as well as the limited expansion opportunities in this highly constrained area. Confirming Union Pacific's prior statements, both written and oral, we cannot

make any part of the Martinez Subdivision available for the high-speed rail alignment, including the aerial portion over the Sacramento Valley Station.

- 5) Certain safety risks are inherent in locating HSR adjacent to a 100-foot-wide, freight rail right of way carrying mainline freight trains at speed. Although Union Pacific and other railroads have made astonishing progress over the years in reducing freight train derailments, major derailments still occur. In most instances, derailments will remain within the confines of the rail right of way, but some derailments may propel rail cars onto the tracks of an adjacent passenger operation. Some derailments also cause fires or explosions. A freight train derailment that coincides with passage of a 200-plus m.p.h. HSR train—which will not have the safety and structural protections of current passenger rail equipment—could result in a catastrophic incident. Although exceedingly rare, a derailment of a high-speed train adjacent to a freight line could also compound the extent of the accident if a freight train were in the area. The Authority must consider and develop mitigation options for these risks that do not require use of Union Pacific’s right of way.
- 6) Freight trains and HSR trains cannot be operated on the same tracks at any time or at any location, including at-grade crossings. Similarly, freight trains should never operate on any HSR trackage. Completely separate trackage and grade separations must be provided.

The Notice of Preparation and accompanying map do not identify Union Pacific’s Sacramento Subdivision (former Western Pacific line) between Stockton and Sacramento as a potential alternative route for the HSR. Union Pacific owns the Sacramento Subdivision right of way in fee simple between Stockton (El Pinal) and Sacramento (Haggin). My May 13, 2008, letter to Mehdi Morshed would be equally applicable to the Sacramento Subdivision.

Union Pacific, however, may be able to accommodate “higher speed” rail operations (up to 110 mph) on a portion of this subdivision. As an alternative to HSR’s other alignment proposals, Union Pacific is willing to enter into discussions with HSR for the joint use of a portion of Union Pacific’s Sacramento Subdivision extending between Stockton (El Pinal) and the vicinity of the former WP Curtis Park Railyard for higher speed operations not exceeding 110 mph. Sacramento RT has a passenger station at the terminus of its Blue Line at Meadowview Station. HSR passengers could perform a cross-platform transfer between HST and Sacramento RT at the Meadowview Station to access the extensive Sacramento RT light rail network in the greater Sacramento region.

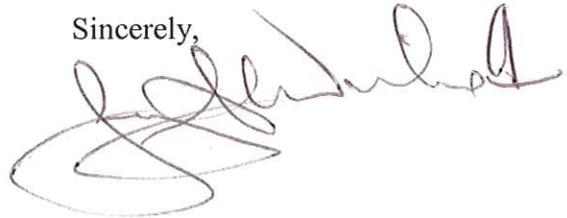
These comments do not address a potential alternative route via the Central California Traction Company (CCT) right of way shown in the Notice of Preparation. The CCT may submit its own scoping comments. Further, to the extent that the preferred HSR alignment is within or adjacent to the BNSF Railway Company (BNSF) right of way on any part of the Merced to Sacramento segment, Union Pacific offers no comments.

Union Pacific is confident that its concerns listed herein will be fully addressed by the Authority during the EIR/EIS process.

Union Pacific is willing to meet with the Authority to discuss its concerns about high-speed rail operation and to better understand the Authority's intentions regarding Union Pacific rights of way. Following such meeting, Union Pacific will be glad to consider all future requests by the Authority for information concerning operations, construction standards and mapping data.

Please direct all requests and correspondence to the undersigned.

Sincerely,

A handwritten signature in dark ink, appearing to be "J. J. ...", written in a cursive style.

Attachment



Scott D. Moore
Vice President Public Affairs

July 7, 2008

Mr. Quentin L. Kopp
Chairperson
California High-Speed Rail Authority Board
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Final Bay Area to Central Valley HST Program EIR/EIS

Dear Chairperson Kopp:

Union Pacific Railroad Company (UPRR) appreciates the opportunity to provide the following comments to the High-Speed Rail Board with respect to the above-referenced EIR/EIS.

UPRR wishes to emphasize that we are not opposed to the concept of high-speed rail nor would we oppose implementation of the project should the voters approve the bond issue in November. Our concern is that the project should not be designed to utilize or occupy any of our rights of way. Our rights of way are limited in width and are fully dedicated to freight service, and, in some instances, to commuter passenger trains. UPRR simply cannot meet the future freight transportation needs of California if our right of way is taken away for high-speed rail.

To respond to the specific corridors proposals for high-speed rail, UPRR points out that our San Jose to Gilroy right of way is very narrow by railroad standards -- primarily 60-feet or less -- and is bounded on one side by a major arterial highway. We could not give up a 50-foot exclusive width right of way to high-speed rail and remain in business.

Even though our right of way is wider (primarily 100-feet) along most of the Central Valley line, a loss of 50 feet would render future freight rail expansion impossible. As fuel prices rise and the nation becomes more concerned with the environmental effects of transportation, we need the ability to expand our infrastructure, perhaps substantially. In addition, we serve numerous industries on both sides of our track. High-speed rail would cut off, forever, our ability to expand capacity in the Central Valley, leaving California with only highway alternatives. It also would disrupt existing rail-served businesses and prevent new rail-served industries from locating on one or both sides of our rail line. This is not a wise transportation decision for the State.

Regarding Caltrain's San Francisco – San Jose corridor, UPRR does not own the right of way but has a freight easement over Caltrain's tracks. Our freight operations already are restricted to avoid delaying Caltrain's commuter trains. Imposing two exclusive high-speed rail tracks on a 50-foot right of way effectively will end our ability to provide freight service to customers on this corridor, including the Port of San Francisco. We will have the same concerns between Sylmar and Los Angeles, where Metrolink's commuter line right of way is designated for high-speed rail service.

An effective and efficient freight rail network is vital to California's economic future. Policy makers such as the high-speed rail board should not jeopardize UPRR's ability to provide such freight service by assuming that high-speed rail will have no impact. UPRR urges the board to carefully consider corridor routes that do not utilize our rights of way.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott D. Moore", written over a horizontal line.

Scott D. Moore

cc: Mehdi Morshed, California High-Speed Rail Authority
Jerry Wilmoth, Union Pacific Railroad
Wesley Lujan, Union Pacific Railroad



May 13, 2008

Mr. Mehdi Morshed
Executive Director
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento, California 95814

Re: California High Speed Rail Route

Dear Mr. Morshed:

Reference is made to our meeting of May 9, 2008, to discuss the current status of the California high-speed rail initiative and its possible impacts on Union Pacific Railroad.

It was a very informative meeting to hear the efforts you are undertaking as the high-speed train bond measure is being prepared for the November, 2008 ballot.

After hearing your plans regarding the proposed routing for this service, Union Pacific feels it is important for the California High Speed Rail Authority (CHSA) to once again understand Union Pacific's position as related to potential alignments along Union Pacific corridors. Union Pacific has carefully evaluated CHSA's project and for the variety of reasons we discussed during our meeting, does not feel it is Union Pacific's best interest to have any proposed alignment located on Union Pacific rights-of way. Therefore, as your project moves forward with its final design, it is our request you do so in such a way as to not require the use of Union Pacific operating rights-of-way or interfere with Union Pacific operations. The State of California and the nation need railroads to retain their future ability to meet growing demand for rail cargo transportation, or that cargo will be in trucks on the highways.

Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jerry Wilmoth".

Cc: Scott Moore - UP
Wesley Lujan - UP

Jerry Wilmoth
General Manager Network Infrastructure

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