

Bay Area to Central Valley
High-Speed Train

Partially Revised FINAL Program Environmental Impact Report

April 2012



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

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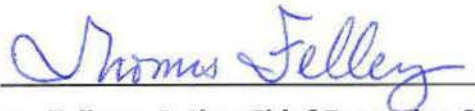
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**Bay Area to Central Valley High-Speed Train
Partially Revised Final Program
Environmental Impact Report**

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
California High-Speed Rail Authority



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Date: April 5, 2012

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PREFACE

P.1.1 What Is This Document?

This document is a Partially Revised Final Program Environmental Impact Report (EIR) for the Bay Area to Central Valley High-Speed Train (HST). The Partially Revised Final Program EIR document was prepared to address November 2011 court rulings in the *Town of Atherton* litigation (*Atherton 1* and *Atherton 2*) challenging the 2010 *Bay Area to Central Valley High-Speed Train (HST) Revised Final Program EIR/EIS*. In that litigation, the Superior Court found that the 2010 Revised 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:

- Recirculation is required to address noise, vibration, and construction impacts of shifting Monterey Highway.
- Recirculation is required to address traffic impacts on surrounding local roads due to narrowing Monterey Highway.
- Recirculation is required to address the impacts of potentially moving freight tracks closer to adjacent land uses along the San Francisco Peninsula.
- Recirculation is required to address impacts of reduced access to surface streets from potential lane closure along the San Francisco Peninsula.

In addition, the Court concluded that the Authority's CEQA finding on traffic impacts associated with narrowing Monterey Highway were not supported by substantial evidence.

The remainder of the 2010 Revised Final Program EIR either was not challenged in litigation and is presumed adequate, or was challenged in litigation and determined by the Court to comply with CEQA. The complete text of the 2009 ruling in *Atherton 1*, and the 2011 rulings in *Atherton 1* and *Atherton 2*, can be reviewed on the Authority's website at http://www.cahighspeedrail.ca.gov/ba_cv_program_eir.aspx.

To comply with the court rulings, the Authority recirculated revised portions of the prior 2010 Revised Program EIR and 2008 Final Program EIR in a document called the Bay Area to Central Valley HST Partially Revised Draft Program EIR (Partially Revised Draft Program EIR) for 45 days. By the close of the 45-day public comment period, the Authority received more than 50 written letters/submissions and verbal statements at the public meeting, totaling more than 400 individual comments.

This Partially Revised Final Program EIR is a multi-volume document that includes the text of the Partially Revised Draft Program EIR, with some textual modifications in response to comments; comments on the Partially Revised Draft Program EIR; a list of persons, organizations and agencies commenting on the Partially Revised Draft Program EIR; responses to the significant environmental points raised in the comments; and the full text of the 2010 Revised Final Program EIR, including volumes 1 and 2 (text and responses to comments) and 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 Partially Revised Final Program EIR includes three distinct stages of the Authority's program EIR process for the Bay Area to Central Valley study area: (1) one volume consists of the 2012 revised and recirculated portions of the August 2010 Revised Final Program EIR and 2008 Final Program EIR and

comments and responses thereupon; (2) two volumes consist of the 2010 revised and recirculated portions of the May 2008 Final Program EIR; and (3) three volumes comprising the May 2008 Final Program EIR. The following identifies the components of each part of the Partially Revised Final Program EIR.

PARTIALLY REVISED FINAL PROGRAM EIR

The Partially Revised Final Program EIR is organized into nine (9) chapters that collectively address the issues identified by the Superior Court in the *Town of Atherton* rulings from November 2011.

Chapter 1, Introduction and Summary: Describes the basis for recirculating portions of the prior Program EIR analysis; 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; and describes the relationship of the Program EIR to second-tier, project-level EIR work in progress.

Chapter 2: Additional Noise & Vibration Analysis

This chapter adds to Chapter 3.4 of the 2008 Final Program EIR. It analyzes noise and vibration effects of shifting a stretch of Monterey Highway between San Jose and Gilroy to implement the high-speed train project. It also analyzes noise and vibration related to the potential for moving freight rail activity to outside tracks along the San Francisco Peninsula and South of San Jose between Tamien and Lick, placing freight closer to adjacent land uses in some locations.

Chapter 3: Additional Traffic Analysis

This chapter adds to Chapter 3.1 of the 2008 Final Program EIR. It analyzes the traffic impacts on surrounding local streets resulting from the lane reduction on a stretch of Monterey Highway between San Jose and Gilroy to implement the high-speed train project. It also analyzes traffic impacts resulting from lane closures on adjacent parallel streets in some locations along the San Francisco Peninsula where the current Caltrain right of way would be expanded to accommodate the high-speed train project. Additional analysis is also provided for the potential loss of traffic lanes along the Oakland to San Jose corridor in the City of Hayward.

Chapter 4: Revised Construction Impacts Discussion

This chapter revises Chapter 3.18 from the 2008 Final Program EIR to clarify the construction impacts anticipated with the adjustments to Monterey Highway and movement of tracks in an active rail corridor to implement the high-speed train project.

Chapter 5: New Information and Effect on Program EIR Analysis

This chapter describes an assessment of new information and changed conditions since the Authority's September 2, 2010 decisions based on the Revised Final Program EIR, including the Draft 2012 Business Plan and the Revised 2012 Business Plan, and discusses the implications for the programmatic environmental analysis.

Chapter 6: Staff Recommendation of a Preferred Network Alternative for Connecting the Bay Area to the Central Valley and Information in Partially Revised Final Program EIR

This chapter discusses the information contained in the Partially Revised Final Program EIR, and in the 2008 Final Program EIR and 2010 Revised Final Program EIR, and concludes that the new and revised information does not change the previous staff recommendation that the Pacheco Pass Network Alternative serving San Francisco via San Jose is the Preferred Network Alternative.

Chapter 7: Unavoidable Adverse Impacts

This chapter discusses how the information contained in this revised material affects the unavoidable and adverse impacts described in Chapter 9 of the 2008 Final Program EIR and Chapter 8 of the 2010 Revised Final Program EIR.

Chapter 7A: Additional Design Features and Mitigation Strategies

This chapter includes additions to project design features and mitigation strategies based on input received in comments on the Partially Revised Draft Program EIR.

Chapter 8: List of Preparers identifies the authors of the Partially Revised Final Program EIR.

Chapter 9: Sources Used in Document Preparation identifies primary sources of information used in preparation of the Partially Revised Final Program EIR.

Chapters 10 – 19: Responses to Comments

The Partially Revised Final Program EIR includes copies of all written comments received during the public review period for the Partially Revised Draft Program EIR (January 6, 2012 to February 21, 2012) and transcripts of all verbal comments received during the public meeting in San Jose on February 9, 2012. Each letter/submission and comment is assigned a unique letter/submission number and comment number. Following each comment letter, a response is provided, referenced by comment number. Where appropriate, the response indicates where to find more information on the topic in the Partially Revised Final Program EIR.

2010 REVISED FINAL PROGRAM EIR

The Partially Revised Final Program EIR includes the two volumes of the 2010 Revised Final Program EIR.

The 2010 Revised Final Program EIR, Volume 1, includes a summary (ch. 1); and revised/new text of: the revised project description and revised impact analyses for San Jose to Gilroy (ch. 2); 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 (ch. 3); impacts to Union Pacific Railroad freight operations (ch. 4); revised information on costs and operations (ch. 5); a comparison of the HST network and alignment alternatives (ch. 6); identification of the preferred alternative (ch. 7); unavoidable adverse impacts (ch. 8); list of preparers (ch. 9); and sources used in document preparation (ch. 10).

The 2010 Revised Final Program EIR, Volume 2, includes all comments received on the March 2010 Revised Draft Program EIR and responses to those comments.

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 Partially Revised Draft Program EIR?

The following updates, additions, and revisions have been made since the Partially Revised Draft Program EIR was circulated in January and February 2012 and have been included in this Partially Revised Final Program EIR.

Change	Location
Updated text to refer to Partially Revised Final Program EIR.	• All chapters
Updated text regarding the public comment process on the Partially Revised Draft Program EIR and preparation of Partially Revised Final Program EIR.	• Chapter 1
Clarification of noise screening measurement.	• Chapter 2, sections 2.1 and 2.3
Added text regarding additional mitigation strategies.	• Chapter 2, section 2.5
Added text indicating that no additional or unique vibration impacts would occur due to Monterey Highway.	• Chapter 2, section 2.5
Added Santa Clara County as an agency to work with on establishing traffic management measures as part of a second-tier project.	• Chapter 2, section 2.5
Updated text on San Francisco Peninsula traffic data collection dates.	• Chapter 3, section 3.1
Added text and tables related to AM traffic data and analysis.	• Chapter 3, section 3.2
Added clarifying text that the typical construction impacts also include highway capacity improvement projects.	• Chapter 4, section 3.18.3
Added additional construction noise mitigation strategies.	• Chapter 4, section 3.18.6
Revised text related to level of significance with implementation of mitigation strategies.	• Chapter 4, section 3.18.6
Updated discussion of the Draft 2012 Business Plan and Revised 2012 Business Plan.	• Chapter 5
Updated discussion of preferred alternative to incorporate comments received during public comment period for Partially Revised Draft Program EIR.	• Chapter 6
Clarified additional environmental resource topics potentially affected by grade separations.	• Chapter 7, Table 7-1
New Chapter 7A added with additional mitigation strategies and design practices based on responses to comments.	• Chapter 7A
Updated and added sources used in document preparation.	• Chapter 9

P.1.3 What Happens Next?

At the completion of this revised program environmental review process, the Authority will consider whether to certify the Partially Revised Final Program EIR. If the Authority certifies the Partially 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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1 INTRODUCTION AND SUMMARY

The California High-Speed Rail Authority (Authority) has recirculated portions of its 2008 Final Program Environmental Impact Report (EIR) and 2010 Revised Final Program EIR to address November 2011 court rulings in the *Town of Atherton* litigation challenging the 2010 *Bay Area to Central Valley High-Speed Train (HST) Revised Final Program EIR*. This chapter describes the basis for circulating the Partially Revised Draft Program EIR, the contents of this 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 Partially Revised Draft Program EIR

The Partially Revised Draft Program EIR was circulated to address specific topics identified by the Sacramento Superior Court as part of two California Environmental Quality Act (CEQA) challenges. The original case, *Atherton 1* (Sacramento Superior Court No. 34-2008-8000022), challenged the Authority's July 2008 certification of the Bay Area to Central Valley HST Final Program EIR (2008 Final Program EIR) for compliance with CEQA and its selection of the Pacheco Pass Network Alternative for further analysis in second-tier EIRs. This case resulted in a final judgment in November 2009, requiring the Authority to undertake additional analysis in specified areas. In response to the *Atherton 1* final judgment, the Authority prepared a Revised Draft Program EIR, circulated it for public comment, and issued a Revised Final Program EIR in August 2010. In September 2010, the Authority made a new decision to certify the Revised Final Program EIR for compliance with CEQA. The Authority also made a new decision to approve the Pacheco Pass Network Alternative, as well as approved CEQA findings, a mitigation plan, and a statement of overriding considerations.

In October 2010, the petitioners in the *Atherton 1* case challenged the adequacy of the Authority's actions under CEQA and the *Atherton 1* final judgment. An additional lawsuit was filed on the same day, called *Atherton 2* (Sacramento Superior Court No. 34-2010-8000679), also challenging the Authority's action as not complying with CEQA. The court considered the two cases together and on November 10, 2011, issued a ruling in each case. In the rulings, the Court held as follows:

- Recirculation is required to address noise, vibration, and construction impacts of shifting Monterey Highway.
- Recirculation is required to address traffic impacts on surrounding local roads due to narrowing Monterey Highway.
- Recirculation is required to address the impacts of potentially moving freight tracks closer to adjacent land uses along the San Francisco Peninsula.
- Recirculation is required to address impacts of reduced access to surface streets from potential lane closure along the San Francisco Peninsula.

In addition, the Court concluded that the Authority's CEQA finding on traffic impacts associated with narrowing Monterey Highway was not supported by substantial evidence.

The remainder of the 2010 Revised Final Program EIR either was not challenged in litigation and is presumed adequate, or was challenged in litigation and determined by the Court to comply with CEQA. The complete text of the 2009 ruling in *Atherton 1*, and the 2011 rulings in *Atherton 1* and *Atherton 2*, can be reviewed on the Authority's website at http://www.cahighspeedrail.ca.gov/ba_cv_program_eir.aspx.

1.2 Summary of Partially Revised Final Program EIR

The Authority has recirculated portions of its 2008 Final Program EIR and 2010 Revised Final Program EIR to address the *Atherton* November 2011 court rulings described above. The requirement to revise and recirculate portions of the program EIR does 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, this document contains the following information and analysis:

Chapter 2: Additional Noise & Vibration Analysis

This chapter adds to Chapter 3.4 of the 2008 Final Program EIR. It analyzes noise and vibration effects of shifting a stretch of Monterey Highway between San Jose and Gilroy to implement the high-speed train project. It also analyzes noise and vibration related to the potential for moving freight rail activity to outside tracks along the San Francisco Peninsula and South of San Jose between Tamien and Lick, placing freight closer to adjacent land uses in some locations.

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This chapter adds to Chapter 3.1 of the 2008 Final Program EIR. It analyzes the traffic impacts on surrounding local streets resulting from the lane reduction on a stretch of Monterey Highway between San Jose and Gilroy to implement the high-speed train project. It also analyzes traffic impacts resulting from lane closures on adjacent parallel streets in some locations along the San Francisco Peninsula where the current Caltrain right-of-way would be expanded to accommodate the high-speed train project. Additional analysis is also provided for the potential loss of traffic lanes along the Oakland to San Jose corridor in the City of Hayward.

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This chapter describes an assessment of new information and changed conditions since the Authority’s September 2, 2010 decisions based on the Revised Final Program EIR, including the Draft 2012 Business Plan and the Revised 2012 Business Plan, and discusses the implications for the programmatic environmental analysis.

Chapter 6: Staff Recommendation of a Preferred Network Alternative for Connecting the Bay Area to the Central Valley and Information in Partially Revised Final Program EIR

This chapter discusses the information contained in this Partially Revised Final Program EIR, and in the 2008 Final Program EIR and 2010 Revised Final Program EIR, and concludes that the new and revised information does not change the previous staff recommendation that the Pacheco Pass Network Alternative serving San Francisco via San Jose is the Preferred Network Alternative.

Chapter 7: Unavoidable Adverse Impacts

This chapter discusses how the information contained in this revised material affects the unavoidable and adverse impacts described in Chapter 9 of the 2008 Final Program EIR and Chapter 8 of the 2010 Revised Final Program EIR.

Chapter 7A: Additional Design Features and Mitigation Strategies

This chapter includes additions to project design features and mitigation strategies based on input received in comments on the Partially Revised Draft Program EIR.

Chapter 8: List of Preparers

Chapter 9: Sources Used in Document Preparation

Chapters 10-19: Responses to Comments

This chapter includes comments received on the Partially Revised Draft Program EIR and responses to those comments.

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 Partially Revised Draft Program EIR.

1.3.1 Prior 2008 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 website (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 Prior 2010 Revised Draft Program EIR and Revised Final Program EIR Notification and Circulation

The Authority circulated the 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. 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. A total of 3,755 comments were submitted to the Authority during this review period and were addressed as part of the August 2010 Revised Final Program EIR. The Revised Draft and Final Program EIR documents and/or notices were distributed to over 53,000 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 Revised Draft and Final Program EIR, as well as the 2008 Final Program EIR, were made available to the public through the Authority website (www.cahighspeedrail.ca.gov) and also available at libraries in Fremont, Gilroy, Livermore, Merced, Modesto, Menlo Park, Mountain View, Oakland, Pleasanton, Palo Alto, Sacramento, San Francisco, San

Jose, Stockton, and Tracy. 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. Newspaper announcements, notices, and postcards were distributed announcing the public meeting.

1.3.3 Notification and Circulation of the Partially Revised Draft Program EIR

The Authority circulated a January 2012 Partially Revised Draft Program EIR to address November 2011 court rulings in the *Town of Atherton* litigation challenging the 2010 *Bay Area to Central Valley High-Speed Train (HST) Revised Final Program EIR/EIS*.

Notice regarding the availability and the circulation of the January 2012 Partially Revised Draft Program EIR was provided pursuant to CEQA. The Partially Revised Draft Program EIR was made available to the public through the Authority website (www.cahighspeedrail.ca.gov) on January 5, 2012. The Partially Revised Draft Program EIR was distributed on January 5, 2012 as well. Either a printed copy or a CD along with a Notice of Availability was sent to over 360 state, federal, and local 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 January 6, 2012 initiating the required 45-day public comment period that extended to February 21, 2012. Notices were also posted at 9 county clerk offices within the project area. The Partially 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 and the 2010 Revised Final Program EIR available to the public. The Notice of Availability and Notice of a Public Meeting was distributed to over 24,000 individuals on the program mailing list on January 6, 2012 and published in 11 newspapers throughout Bay Area and Central Valley including the San Jose Mercury News, Sacramento Bee, Daily Republic, Oakland Tribune, San Francisco Examiner, Modesto Bee, Merced Sun Star, Fresno Bee, Stockton Record, Palo Alto Daily News, and Gilroy Dispatch.

**Table 1-1
Partially Revised Draft Program EIR 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

Library	Location
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 a Public Meeting in San Jose on February 9, 2012 to receive comments from the public and public agencies on the Partially Revised Draft Program EIR. The meeting was held from 4:00 p.m. to 7:00 p.m. at the San José City Hall, City Council Chambers, 200 East Santa Clara St, San José CA 95113.

A. COMMENTS ON THE PARTIALLY REVISED DRAFT PROGRAM EIR

Written comments on the Partially Revised Draft Program EIR were sent to the Authority in the form of letters, electronic mail, and submissions through the Authority's website. Comments from the public meeting 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. More than 50 people provided over 400 comments during the circulation period (either through written letters or oral testimony).

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

Type of Commenter	Number of Commenters	Number of Comments
Federal Agencies	1	1
Tribes	1	5
State Agencies	1	1
Local Agencies	17	258
Businesses/Organizations	10	65
Individuals	20	91
Public Meeting	6	15
Total	56	436

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 information in the Partially Revised Draft Program EIR. Other comments addressed the content of the prior program EIRs. Many commenters expressed their views on traffic impacts on the San Francisco Peninsula; how information in the Draft 2012 Business Plan affects the program EIR; and that the Authority should not continue to propose and consider a four-track alignment on the Peninsula, and should instead limit the consideration to only the "Blended System" as proposed by Senator Simitian, Congresswoman Eshoo and Assembly Member Gordon in April of 2011. The comments are included following the text for the Partially Revised Final Program EIR.

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

Following the public comment period on the Partially Revised Draft Program EIR, the Authority has prepared this Partially Revised Final Program EIR. The Partially Revised Final Program EIR includes the full text of the Partially Revised Draft Program EIR with changes based on the comments incorporated and written and verbal comments received on the Partially Revised Draft Program EIR and responses to comments; and the complete 2-volume text of the 2010 Revised Final Program EIR and 3-volume text of the 2008 Final Program EIR.

The *Town of Atherton* November 2011 court rulings require the Authority to rescind its 2010 Revised Final Program EIR certification, rescind its approval of the Pacheco Pass Network Alternative, and make a new decision based on a corrected Program EIR. It is anticipated that the Authority Board will consider rescinding its September 2010 certification of the Revised Final Program EIR and decision approving the Pacheco Pass Network Alternative at an upcoming, publicly noticed meeting. Following the public comment period on the Partially Revised Draft Program EIR, the Authority has prepared this Partially Revised Final Program EIR including responses to the comments received during the comment period. At a publicly noticed meeting, the Authority will consider the Partially Revised Final Program EIR, along with the 2008 Final Program EIR and 2010 Revised Final Program EIR, and the whole record before it, in determining whether to make the following decisions:

- Certify the Partially Revised Final Program EIR (including the 2008 Final Program EIR and the 2010 Revised Final Program EIR) for compliance with CEQA.
- Approve findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program in compliance with CEQA.
- Approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs.

The 2008 Program EIR examined eleven representative network alternatives that would utilize the Altamont Pass, six that would use the Pacheco Pass, and four that would utilize the Pacheco Pass with Altamont Pass for local service, depicted in Chapter 7 of that document. The purpose of this revised program EIR process is to provide the necessary analysis to support the selection of a network alternative to connect the Bay Area and Central Valley, via the Altamont Pass, via the Pacheco Pass, or via both passes.

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

The *Town of Atherton* CEQA litigation has been ongoing since 2008. During the ensuing years, the court has not required the Authority to halt its second-tier, project-level environmental studies for the Bay Area to Central Valley sections, which include the San Francisco to San Jose and the San Jose to Merced sections. The Authority has therefore continued with its project-level EIR work for these sections, as well as for other sections within the 800-mile high-speed train system. The development of the San Jose to Merced section project-level Draft EIR is underway, but not yet complete. In May of 2011, the Authority put on hold its work on the Draft EIR for the San Francisco to San Jose section.

Project-level EIR work is ongoing for the Merced to Fresno section, which overlaps in part with the study area for this Partially Revised Program EIR. A project-level Draft EIR/EIS for the Merced to Fresno section has circulated for public and agency comment, and the final EIR/EIS is under preparation. The Merced to Fresno section includes a wye interchange to connect to the San Jose to Merced section. Although this wye interchange is analyzed in the Merced to Fresno Draft EIR/EIS, the Authority will not make a decision regarding the wyes based on the Merced to Fresno project-level EIR/EIS. Instead, the Authority will

examine the wyes further in a subsequent project-level EIR/EIS. Depending on the outcome of the program EIR process, the wye connection to the San Francisco Bay Area could be studied in a project-level Draft EIR/EIS for either a San Jose to Merced section for a Pacheco Pass network alternative, or a more northerly section for an Altamont Pass network alternative.

The *Town of Atherton* November 2011 court rulings require the Authority to rescind its 2010 Revised Final Program EIR certification and rescind its approval of the Pacheco Pass Network Alternative. At the conclusion of this revised program EIR process, the Authority will make a new decision on a network alternative, preferred alignments, and preferred station locations. The new program EIR decision may require adjustment to the environmental work that is underway in the project-level EIRs.

1.6 Summary of Environmental Impacts and Mitigation Strategies

Table 1-3 provides a summary of the environmental impacts and mitigation strategies identified in this document.

**Table 1-3
Summary of Environmental Impacts and Mitigation Strategies**

TOPIC	Significance Conclusion	Mitigation Strategies	Significance Conclusion with Mitigation Strategies
Noise/Vibration from Potentially Moving Freight Trains to Outside Tracks on Expanded Right-of-way on San Francisco Peninsula	Significant (consistent with 2008 Program EIR conclusion)	See mitigation strategies listed in Chapter 2	Noise: less than significant Vibration: significant and unavoidable
Noise/Vibration from Monterey Highway Shift	Significant (consistent with 2008 Program EIR conclusion; also described as separate significant impact for clarity)	See mitigation strategies listed in Chapter 2	Noise: less than significant Vibration: significant and unavoidable
Noise/Vibration from Potentially Moving Freight Trains to Outside Tracks on Expanded Right-of-way Between Tamien and Lick	Significant (consistent with 2008 Program EIR conclusion)	See mitigation strategies listed in Chapter 2	Noise: less than significant Vibration: significant and unavoidable
Traffic Impacts of Potential Lane Loss on San Francisco Peninsula	Significant	See mitigation strategies listed in Chapter 3	Significant and unavoidable
Traffic Impacts from Monterey Highway Narrowing (on Monterey Highway itself and on surrounding roadways)	Significant	See mitigation strategies listed in Chapter 3	Significant and unavoidable
Traffic Impacts of Potential Lane Loss in Hayward	Significant	See mitigation strategies listed in Chapter 3	Significant and unavoidable
Construction Impacts	Significant	See mitigation strategies listed in Chapter 4	Significant and unavoidable in some resource areas
Significant Traffic Impacts at Interim Terminus Stations under Phased Implementation	Significant	See mitigation strategies listed in Chapter 5	Significant and unavoidable
Significant Impacts to Connecting Commuter Rail Service from HST riders boarding at Interim Terminus Stations under Phased Implementation	Significant	See mitigation strategies listed in Chapter 5	Significant and unavoidable
Adverse Impacts from Grade Separation	Significant	See mitigation strategies listed in Chapter 5	Significant and unavoidable

2 NOISE & VIBRATION

This chapter provides additional noise and vibration impacts analysis in two areas identified by the November 2011 *Town of Atherton* rulings. In the rulings, the court held that the Program EIR's discussion of noise and vibration required further analysis in two areas: (1) noise and vibration impacts associated with potentially placing freight trains on the outside tracks of the Caltrain right-of-way, closer to adjacent residences and businesses along the San Francisco Peninsula and (2) noise and vibration impacts associated with the shift of Monterey Highway to implement the high-speed train project. Additional analysis is also provided for potentially placing freight trains closer to adjacent residences and businesses for a short portion south of San Jose. The following new text addresses these areas and adds to the 2008 Final Program EIR, Chapter 3.4. Changes to text from the Partially 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.

A noise and vibration screening analysis was conducted as part of the 2008 Final Program EIR to identify potential areas of impact on sensitive receptors. The methodology, analysis, and conclusions identified in the discussion presented below were conducted to clarify and confirm the conclusions identified in the 2008 Final Program EIR. Out of an abundance of caution, additional methodology was utilized for Monterey Highway to identify whether any additional or different impacts existed or mitigation strategies beyond those previously identified should be added.

2.1 Regulatory Requirements and Methods of Evaluation (addition to Section 3.4.1 of 2008 Final Program EIR)

The methodology and CEQA significance criteria discussion presented in the 2008 Final Program EIR, Section 3.4.1 remain accurate. The reader is referred to that document for additional context for how noise and vibration impacts along the alignments in the study area were assessed as having a low, medium, or high impact rating. The following discussion adds to the discussion of methodology and clarifies the method of assessing environmental impacts for the potential movement of freight train tracks and the shift of Monterey Highway. The following text is an addition to Section 3.4.1 of the 2008 Final Program EIR.

A. POTENTIAL MOVEMENT OF FREIGHT TRAIN TRACKS DUE TO HST

As described in Chapter 3.4 of the 2008 Final Program EIR, a noise and vibration screening analysis was conducted for the HST alignment alternatives in accordance with the Federal Railroad Administration (FRA) (U.S. Department of Transportation 2005) and Federal Transit Administration (FTA) (U.S. Department of Transportation 2006) criteria and guidelines. The FRA has established criteria for assessment of noise and vibration impacts for high-speed ground transportation projects with speeds over 125 mph. In areas with train speeds that would be equal to or less than 125 mph, a corresponding screening procedure developed by the FTA was used in the assessment of the HST Alignment Alternatives.¹ For the proposed HST corridor from San Francisco to San Jose, the FTA criteria were used to assess the noise and vibration impacts associated with the HST alignment alternatives within the shared-use Caltrain corridor because it is expected that HST, Caltrain, and freight trains would all run at speeds below 125 mph. This screening level of analysis encompassed all rail activity within the corridor, including freight and passenger rail service. Therefore, potential changes in alignment of individual existing tracks (e.g., freight or passenger) within a rail corridor and/or the addition of new tracks within an existing corridor or with expansion of the corridor, do not

¹ Although the screening methodologies are the same for the FRA and FTA, the distance used to screen for a particular corridor is dependent on train speed. The FRA's guidance manual refers to the FTA's when train speeds are equal to or below 125, and the FTA's refers to the FRA guidance when speeds are above 125.

alter the methodology of a screening analysis. Table 4.1 of the FTA Guidance Manual (2006) provides screening distances for various types of rail projects involving different vehicle technologies and corridor types. The corridor between San Francisco and San Jose is an active rail corridor with passenger and limited freight service. The FTA Guidance Manual classifies this as a "commuter rail mainline" corridor and uses a screening distance of 375 feet from ~~track~~ the centerline of the guideway (i.e., alignment).²

By design, screening produces a conservative estimate of the number of sensitive receivers that could be affected along different corridors under consideration. Screening allows for a comparison of the potential number of impacted receivers (homes, schools, etc.) between different alternative alignments, but it is a rough measure and not intended to provide specific information on impacts to individual properties within a corridor. The method identifies all potentially impacted developed lands by type of use within the study area. Subsequent project-level analysis is likely to indicate lower levels of potential impact by consideration of structures or land forms blocking the path to the receptor.

For the screening analysis, the impact metrics and impact ratings are defined in Table 2-1 (same as Table 3.4-1 in the 2008 Final Program EIR). The rating scheme is designed to indicate the potential for noise and vibration impacts along the HST alignment alternatives.

Table 2-1
Unchanged Table 3.4-1—Ratings Used for Noise and Vibration Analysis

Rating	Impact Metric	
	Noise	Vibration
Low	Less than 80	Less than 40
Medium	80–200	40–100
High	Greater than 200	Greater than 100

Source: Authority 2008

Impact Metric = (Residential Population in the Impact Area/Mile) + 0.3 × (Mixed Use Population in the Impact Area /Mile) + (100 × Number of Hospitals in the Impact Area)/Mile + (250 × Number of Schools in the Impact Area)/ Mile

B. POTENTIAL LANE NARROWING AND SHIFTING OF MONTEREY HIGHWAY

The noise and vibration study area for the HST project in the San Jose to Central Valley Corridor was determined using FRA's and FTA's noise screening procedure. The FRA and FTA screening distances, measured from the centerline of the HST right-of-way (i.e., alignment) adjacent to Monterey Highway, was 375 feet for the segment of Monterey Highway that would be narrowed from six lanes to four lanes and where the roadway would be shifted east. This screening distance encompassed and identified noise sensitive receptors adjacent to and well beyond the limits of potential noise exposure that would result from an eastern shift of Monterey Highway traffic lanes. The prior analysis conducted in the 2008 Final Program EIR captured the number of people that may be exposed to impact-level noise that could occur from the shifting of Monterey Highway. Out of an abundance of caution, an additional methodology based on Federal Highway Administration (FHWA) guidelines was utilized for Monterey Highway to identify whether any additional or different impacts would occur or mitigation strategies beyond those previously identified would be needed.

² Guideway – Supporting structure to form a track for rolling or magnetically-levitated vehicles (FTA 2006). In other words, guideway is not the track, it is the base upon which the track is placed.

In addition to noise from HST operations, noise from changes in traffic volume and major roadway realignment due to the project have been considered. Because parts of Monterey Highway would be narrowed from six lanes to four lanes and other areas would be shifted up to 60 feet closer to noise sensitive receptors to accommodate the HST alignment, the potential for traffic noise impacts resulting from these changes were considered. FRA adheres to FHWA guidance and methodology for traffic noise impact assessment when traffic noise impacts are anticipated. In contrast to FRA, FHWA does not use screening distances for initial impact assessment, but rather uses defined Noise Abatement Criteria (NAC) for assessing traffic noise impacts at noise sensitive receptors. The FHWA traffic NAC and guidance are outlined in Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR Part 772), which also requires that the Traffic Noise Model (TNM) be used for traffic noise assessment.

In portions of the project where Monterey Highway would be narrowed or shifted, the potential for noise impacts exists at locations where the highway lanes would be shifted closer to noise sensitive receptors. FHWA guidance regarding the physical alteration of an existing highway states that "changes in the horizontal alignment that reduce the distance between the source and the receiver by half or more result in a Type I project" (U.S. Department of Transportation 2010). By this definition, the realignment of Monterey Highway as part of the HST project would be classified as a Type I project.³ FHWA requires identification of highway traffic noise impacts and examination of potential abatement measures for all Type I projects receiving federal-aid funds.

Vibration impact screening for highways is assumed to result in less-than-significant impacts for ground-borne vibration. In addition, FHWA does not have adopted vibration impact assessment criteria.

C. CEQA SIGNIFICANCE CRITERIA (No change from the 2008 Final Program EIR)

At the programmatic level, the project would cause a significant noise or vibration impact under CEQA if it would result in:

- Potential exposure of persons to or generation of noise levels in excess of standards established by the FRA for high-speed ground transportation and by the FTA for rail projects.
- Potential exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

2.2 Affected Environment (addition to Section 3.4.2 of 2008 Final Program EIR)

The affected environment presented in the 2008 Final Program EIR, Section 3.4.2 remains accurate. The reader is referred to that document for additional context. The following text is an addition to Section 3.4.2 of the 2008 Final Program EIR.

A. EXISTING NOISE ENVIRONMENT

All regional freeways considered in the study area are major contributors to the ambient noise environment. The HST Alignment Alternatives would primarily follow or parallel existing rail tracks. Along the proposed alignment alternative on the San Francisco Peninsula, along with freeway and

³ FHWA classifies projects into three Types to determine the need for a noise analysis (23 CFR, Part 772.5).

roadway noise, the Caltrain passenger service is a major contributor to the ambient noise levels, especially at grade crossings, where horn noise dominates the noise environment within 0.25 mi of the intersections. In this corridor, freight traffic also occurs, but comprises a small percentage of the total rail traffic on the corridor when compared to the existing Caltrain passenger service, which runs over 90 trains per day through the corridor (Caltrain 2011).⁴

Also in southern San Jose and as far as Gilroy to the south, Caltrain, Amtrak, and freight rail are major contributors to the ambient noise levels. Along the proposed alignment alternative between San Jose and Gilroy, the alignment alternative would follow along Monterey Highway, which would contribute roadway noise. Within the project area, Monterey Highway is six lanes wide for approximately six miles from Hollywood Avenue to south of Blossom Hill Road, and four lanes wide south of Blossom Hill Road.

In the urban areas and suburban areas of the San Francisco Peninsula and San Jose, the ambient noise is estimated to range from L_{dn} 57 to 66 dBA. In many of the residential areas close to the international airports at San Francisco (SFO) and San Jose (SJC), the ambient levels exceed L_{dn} 65 dBA.

2.3 Environmental Consequences (addition to Section 3.4.3 of 2008 Final Program EIR)

The environmental consequences discussion presented in the 2008 Final Program EIR, Section 3.4.3 remains accurate. The reader is referred to that document for additional context. The following text is an addition to Section 3.4.3 of the 2008 Final Program EIR.

A. POTENTIAL MOVEMENT OF FREIGHT TRAIN TRACKS DUE TO HST ON THE SAN FRANCISCO PENINSULA

The HST alternative in the San Francisco to San Jose Corridor is intended to be a four-track, shared-use alignment that would integrate with existing Caltrain passenger service as well as UPRR freight service. The conceptual operating plan anticipates the local Caltrain and freight trains travel predominantly on the outside two tracks and the high-speed trains and express Caltrain trains to travel predominantly on the two inside tracks. However, depending on additional operational study related to integration of the HST with existing passenger and freight services, any of these train services could potentially run on the tracks placed on the outer portion of the newly expanded right-of-way. This would result in trains, including freight, running closer to existing homes, schools, and other noise-sensitive land uses. As described above, the screening analysis performed for this corridor is consistent with FTA methodology which takes into account the potential for freight and passenger trains to be closer to adjacent land. The two additional tracks in the corridor are accounted for because the screening distance is measured from the centerline of the rail corridor (*i.e., alignment*), and at 375 feet the potential impact area is sufficiently wide on either side of the centerline to capture the anticipated expansion of the right-of-way and potential for movement of freight trains to the outside tracks. The expansion of the right-of-way and potential movement of

⁴ The rail corridor in the peninsula is owned by the Caltrain provider, the Peninsula Corridor Joint Powers Board (JPB), who manages train scheduling and determines on which track different trains operate. Freight service is allowed in the corridor when there is a window between passenger trains of at least 30 minutes headway. The Trackage Rights Agreement between the JPB and Southern Pacific Transportation Company (executed in November 1991) specifies that the JPB will make at least one of these windows available between 10:00 am and 3:00 pm each day in both northbound and southbound directions. Between midnight and 5 a.m., at least one main track of the Peninsula Main Line is available for freight with an adequate number of thirty (30) minute headway windows. Although this agreement does not explicitly limit the number of freight trains allowed per day in the corridor, in practice an average of about four freight trains travel in the corridor between Santa Clara Junction in San Francisco each 24 hour period. For the purposes of this evaluation, it is assumed that approximately four freight trains travel in the corridor, two trains during the daytime and two at night.

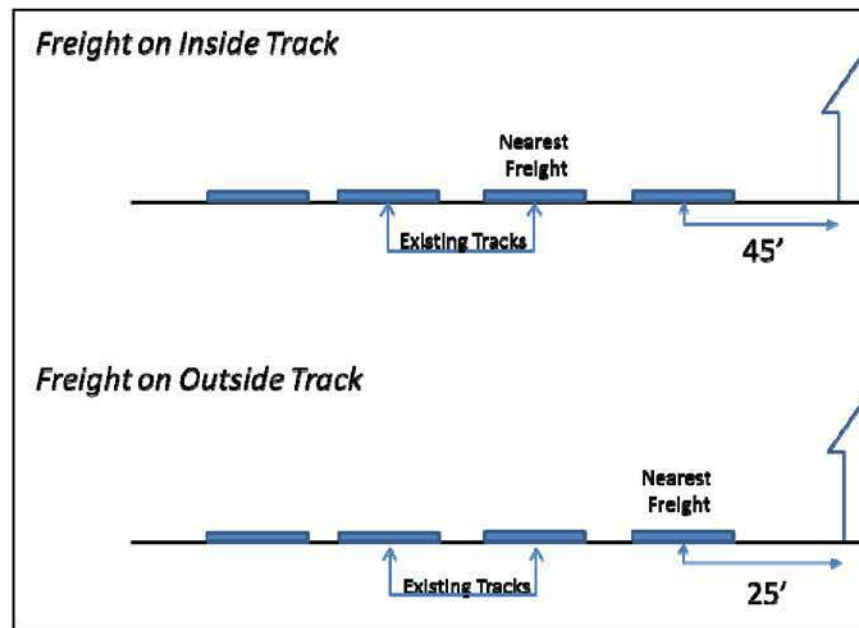
freight train tracks contributes to the overall medium ranking for noise in this corridor, as indicated in Table 3.4-4 of the 2008 Final Program EIR. The vibration analysis and rankings (medium for San Francisco to Dumbarton and high for Dumbarton to San Jose) also incorporate this in the screening methodology. Note that this impact rating takes into account the benefit of the elimination of grade crossings for existing passenger and freight rail in this corridor.

Based on the FTA methodology, the limited expansion of the existing Caltrain rail corridor has little to no effect on the number of properties captured in the screening analysis, or to the noise and vibration effects to properties just outside the right-of-way.

A representative, conservative scenario was developed to illustrate the consequences of moving freight trains closer to adjacent land uses. This scenario considered a four-track alignment where adjacent land uses were assumed to be just 25 feet from the closest track. Two scenarios were simulated (see Figure 2-1 below):

1. Freight trains operate on the inside tracks of a four-track alignment, approximately 45 feet from the adjacent sensitive land use (similar to where freight trains run under existing conditions).
2. Freight trains operate on the outside tracks, approximately 25 feet from the adjacent sensitive land use.

Figure 2-1
Freight Operations on Four-Track Alignment



The difference in noise level associated with freight trains being moved 20 feet closer to the sensitive land use was approximately 0.5 dBA in the 24 hour noise exposure level (Ldn) used to characterize noise impacts using FTA methodology. The vibration level would increase roughly 2.4 VdB, generally considered to be an imperceptible amount. This scenario conservatively assumed that all four freight trains in a 24 hour period would run on the track closest to the adjacent land use, and also assumed that all four freight trains would run at night (10 pm to 7 am).

This example underscores that the potential for freight trains to use outside tracks in a four-track, shared right of way does not change the conclusions in the 2008 Final Program EIR, Chapter 3.4 for the San Francisco to San Jose corridor. Noise impacts between San Francisco and San Jose are medium, vibration impacts are medium (San Francisco to Dumbarton) and high (Dumbarton to San Jose), and both are significant under CEQA at the program level.

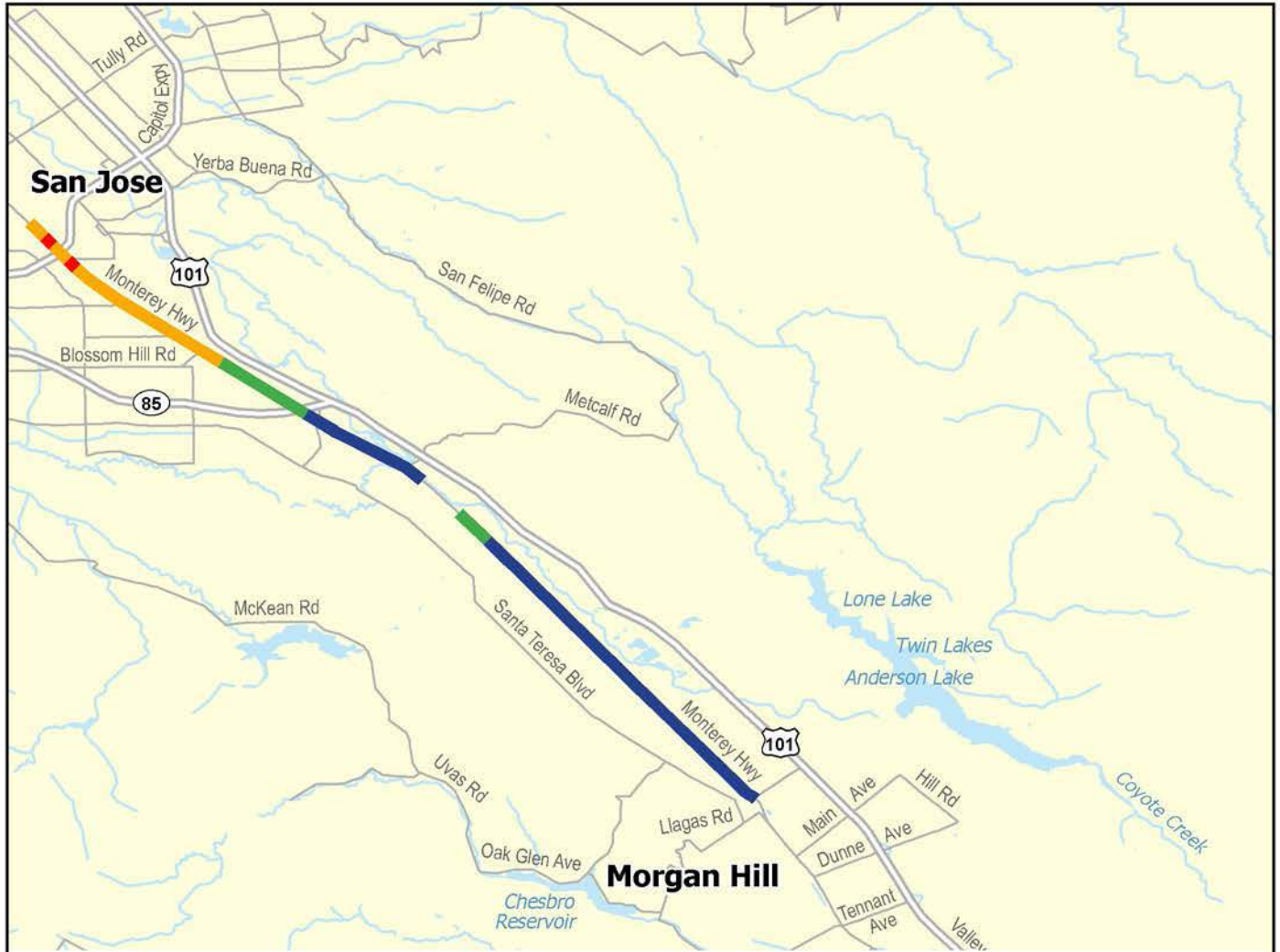
B. POTENTIAL LANE NARROWING AND SHIFTING OF MONTEREY HIGHWAY

To accommodate the HST, Monterey Highway is proposed to be narrowed from six lanes to four lanes and the lanes shifted east generally within the existing right-of-way from approximately Southside Drive to south of Blossom Hill Road (approximately 3.3 miles). The alignment is expected to be generally at grade; however, some areas may be raised or lowered for grade separations, depending on design details not available at the program level. At some locations north and south of Capitol Expressway, the narrowed four lanes and right-of-way of Monterey Highway may need to be shifted to the east up to 25 feet. In addition, the existing four lanes south of Blossom Hill Road would be shifted east within existing right-of-way and in some locations the right-of-way itself would also be shifted east up to 60 feet to accommodate the HST. This would occur in several locations less constrained by existing development. Figure 2-2 illustrates the approximate affected area along Monterey Highway that would require narrowing and/or the right-of-way shifted to the east.

The shift of Monterey Highway could have adverse or beneficial traffic noise impacts on nearby noise sensitive receptors, including residences. If the roadway is shifted east closer to sensitive receptors, traffic noise effects could be adverse; and if the highway is shifted farther away from sensitive receptors on the west, traffic noise effects could be beneficial. The lane reduction as part of the narrowing would have a beneficial traffic noise impact, depending on where the reduced lanes are shifted. Four locations were analyzed at the program level to evaluate potential traffic noise impacts as a result of Monterey Highway being narrowed and the lanes and right-of-way being shifted east. Table 2-2 provides the analysis for the four locations.

Under FHWA guidance, highways are assumed to result in a less than significant impact for vibration. The shift of Monterey Highway traffic lanes to the east would therefore have no additional or unique vibration impacts beyond those described for the San Jose to Central Valley corridor in the 2008 Final Program EIR, Chapter 3.4.

In summary, the anticipated noise impacts from lane narrowing on Monterey Highway and shifting the highway to the east vary, but overall involve significant impacts associated with the highway changes. It should be noted that traffic noise at residences located on the west side of Monterey Highway would be reduced in each of these areas due to any shift of traffic lanes to the east. However, that reduction may not be noticeable because the adjacent train noise would be the dominating noise source, as it is in the existing condition, at the residences located west of Monterey Highway. These impacts have been considered together with the FRA screening methodologies for assessing noise, and do not change the prior conclusion of medium noise impacts and medium vibration impacts for the Pacheco alignment within the San Jose to Central Valley Corridor. In addition, this information does not change the conclusion of the 2008 Final Program EIR that noise and vibration impacts in the San Jose to Central Valley Corridor would be significant under CEQA based on the FRA methodology. Out of an abundance of caution, the significant noise impacts associated with shifting Monterey Highway are also considered a separate significant noise impact under CEQA in this corridor.



LEGEND

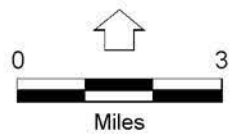
Monterey Highway Narrowing (6 to 4 lanes)

- Lanes shifted within existing right-of-way
- Lanes and right-of-way shifted

Monterey Highway Shifting (Existing 4 lanes remain)

- Lanes shifted within existing right-of-way
- Lanes and right-of-way shifted

- Major Roads
- Other Roads
- Water



**Table 2-2
Noise Impacts Related to Monterey Highway Narrowing or Shifting**

Monterey Highway Narrowing/ Shifting	Noise Impact	Receptors Considered / Included as part of 2008 FRA Noise Screening	Significant Impact
Monterey Highway Narrowing (6 to 4 lanes)			
Traffic lanes shifted east within existing right-of-way (Southside Drive to south of Blossom Hill Road)	Traffic noise levels reduced by 1 to 2 decibels (dB) as a result of the roadway realignment and lane reduction (less traffic).	Yes	No, beneficial
Traffic lanes and right-of-way shifted east up to 25 ft (Southside Drive to Fehren Drive and Capitol Expressway Ramp to Senter Road)	Right-of-way acquisition on east side and removal of existing property walls with traffic lanes closer to sensitive receptors to the east; increase in noise levels by greater than 5 dB without replacement in kind of property walls (similar noise levels with replacement of property walls)	Yes	Yes
Monterey Highway Shifting (Existing 4 lanes remain)			
Traffic lanes shifted east within existing right-of-way (Blossom Hill Road to Bernal Road and south of Coyote Ranch Road to Bailey Avenue)	Traffic noise levels increased by 1 to 2 dB as a result of the roadway realignment.	Yes	Yes
Traffic lanes shifted east up to 60 ft (Bernal Road to just south of Metcalf Road and Bailey Avenue to Cochrane Road)	Right-of-way acquisitions on east side and removal of existing property walls with traffic lanes closer to sensitive receptors to the east; increase in noise levels by greater than 2 to 3 dB with replacement in kind of property walls (any existing walls would be removed due to acquisitions)	Yes	Yes

C. POTENTIAL MOVEMENT OF FREIGHT TRAIN TRACKS DUE TO HST FROM SAN JOSE TO LICK

The HST alternative in the San Jose to Central Valley Corridor from approximately Tamien to Lick (a point near Pull Way in San Jose) is intended to use dedicated track within the Caltrain-owned right-of-way, adjacent to the existing Caltrain passenger service, as well as adjacent to UPRR freight service. To provide space for the addition of the HST tracks, the existing UPRR tracks would need to be relocated from their central position to a new position to the east side of the right-of-way up to 25 feet in some locations. The track on the east side would continue as the dedicated freight service track. Similar to the San Francisco Peninsula, the screening analysis performed for this segment is consistent with FTA methodology and takes into account the potential for freight and passenger trains to be closer to adjacent land uses for limited periods of time. The addition and movement of tracks in the corridor is accounted for and contributes to the overall medium impact rating for noise and vibration in the Pacheco corridor as indicated in Table 3.4-4 of the 2008 Final Program EIR. As noted above, potential shifts of this magnitude are accounted for in the methodology. Therefore,

these movements of tracks would not be anticipated to change the medium impact rating in the analysis provided in Table 3.4-4. In addition, this information would not change the conclusion of the 2008 Final Program EIR that noise and vibration impacts in the San Jose to Central Valley Corridor would be significant under CEQA.

2.4 Role of Design Practices in Avoiding and Minimizing Effects

The role of design practices in avoiding and minimizing effects presented in the 2008 Final Program EIR, Section 3.4.4 remains accurate and unchanged. The reader is referred to that document for additional context.

2.5 Mitigation Strategies and CEQA Significance Conclusions

The following text in Section 3.4.5 on page 3.4-22 of the 2008 Final Program EIR has been revised with the text below.

Based on the analysis above, and considering the design practices described in Section 3.4.4, each of the HST Alignment Alternatives would have significant noise and vibration impacts, as detailed in Table 3.4-4.

The HST Alignment Alternatives would create significant long-term noise and vibration impacts from introduction of a new transportation system. At the same time, the HST Alignment Alternatives would create some long-term noise reduction benefits because noise sources would be eliminated with grade separation of existing grade crossings. It is possible that at the future project-level of analysis, refined data and information would confirm that some sections of the alignment alternatives would result in less-than-significant noise and vibration impacts (i.e., through the Transbay Tunnel); however, for purposes of the programmatic analysis, the long-term noise and vibration impacts are considered significant for all sections. In addition, the HST Alignment Alternatives would involve significant short-term noise and vibration impacts from construction.

As discussed above, the corridor between San Jose and the Central Valley includes implementation of the HST along Monterey Highway, and results in shifting the highway. This particular condition results in additional significant noise and vibration impacts that are unique to this corridor. The San Francisco to San Jose Corridor includes the potential for freight trains to be closer to existing adjacent land uses than currently. This particular condition is also unique to this corridor, however, it is subsumed within the prior analysis of noise effects, which were already considered to have significant noise and vibration impacts.

General mitigation strategies are discussed in this program-level review of potential noise impacts associated with proposed alternatives that would reduce the impacts. General vibration mitigation strategies are less predictable at a program level of analysis because of the site-specific nature of vibration transmission through soil along the alignment. More detailed mitigation strategies for potential noise and vibration impacts would be developed in the next stage of environmental analysis. State-of-the-art noise and vibration mitigation measures can generally be applied to the source (train and associated structures), the path (area between train and receiver), and/or the receiver (property or building). An HST system would be designed and developed to meet state-of-the-art technology specifications for noise and vibration, based on the desire to provide the highest-quality train service possible. Trains and tracks would be maintained in accordance with all applicable standards to provide reliable operations.

Treatments, such as sound insulation or vibration controls to affected buildings, can be effective at reducing noise impacts. Although such treatments may be difficult to implement for the potentially numerous properties adjacent to the right-of-way, and would require protracted implementation procedures and separate design considerations, they have potential to be appropriate in some circumstances. The most feasible and effective mitigation treatments are typically those involving

blocking the line of sight. These mitigation measures can often be applied to the path within the right-of-way, either under or adjacent to the tracks. Potential noise impacts can be reduced substantially by the installation of sound barrier walls constructed to shield receivers from train noise. For vibration mitigation, several track treatments may be considered for reducing train vibrations. Determining the most appropriate treatment would depend on the site-specific ground conditions along the corridor. This program-level analysis has identified areas where future analysis should be given to potential HST-induced vibrations. The type of vibration mitigation and expected effectiveness will be determined as part of the second-tier project-level environmental analyses.

In accordance with Title 23 CFR 772, noise abatement is considered where traffic noise impacts are predicted in areas of frequent human use that would benefit from a lowered noise level. Potential noise abatement measures that are typically considered include the following: avoiding the impact by using horizontal and vertical design alternatives, constructing noise barriers, acquiring property to serve as a buffer zone, using traffic management measures to regulate types of vehicles and speeds, and acoustically insulating public-use or nonprofit institutional structures.

The following mitigation strategies for noise and vibration impacts associated with the shift of Monterey Highway and the potential to move freight train tracks closer to adjacent land uses are added to the end of Section 3.4.5:

A. NOISE BARRIERS FOR MONTEREY HIGHWAY

Noise barriers would be an effective strategy for mitigating Monterey Highway traffic noise as well as noise from the high-speed train. The location and height of potential barriers depends on the results of more detailed noise analysis and design. For Monterey Highway traffic noise impacts, the noise barrier may be located at the high-speed train right-of-way line, the roadway right-of-way line, or potentially at the private property line. Where existing property walls must be removed, such walls would be replaced at the appropriate locations to achieve noise reduction benefits.

B. BUILDING SOUND INSULATION

There may be circumstances where mitigation at the receiver is appropriate. As stated above, receiver mitigation such as building sound insulation or related treatments for individual properties may be difficult to implement. At the program level of analysis, this strategy is considered appropriate for continued consideration. It may be particularly relevant for consideration in areas along the shift of Monterey Highway and along the San Francisco Peninsula.

C. ACQUIRING PROPERTY TO SERVE AS A NOISE BUFFER ZONE

There may be limited circumstances where acquisition of property to service as a noise buffer may be appropriate. This strategy is considered appropriate for consideration as part of project-level environmental review.

D. TRAFFIC MANAGEMENT MEASURES FOR MONTEREY HIGHWAY

Develop traffic management measures, including vehicle speed limits and vehicle type limitations, for Monterey Highway. Work with the City of San Jose and Santa Clara County to establish appropriate traffic management measures to reduce Monterey Highway traffic noise.

In addition to the above mitigation strategies, the Authority will consider vertical profile variations as part of second-tier project planning and environmental review, in consultation with local agencies.

Sound barriers close to HST vehicles can reduce noise by 6 to 10 dB, sound barriers at the right-of-way line 5-8 dB, and building sound insulation 5 to 15 dB. The effectiveness of noise easements would depend on the particular facts of each case.

Consistent with the conclusions about noise and vibration in the 2008 Final Program EIR, the above mitigation strategies are expected to reduce to a less than significant level the noise impacts from shifting the Monterey Highway, as well as the noise impacts of the potential for freight trains on the Peninsula to be closer to nearby land uses. Vibration mitigation is less predictable at the program level of analysis, and therefore the vibration impacts are considered significant even with application of mitigation strategies. Additional environmental assessment would allow a more precise evaluation in the second-tier, project-level environmental documents.

2.6 Subsequent Analysis

The discussion of subsequent analysis presented in the 2008 Final Program EIR, Section 3.4.6 remains accurate and unchanged. The reader is referred to that document for additional context.

3 TRAFFIC, TRANSIT, CIRCULATION, AND PARKING IMPACT ANALYSIS

This chapter provides additional traffic analysis in two areas identified by the November 2011 *Town of Atherton* rulings. In the November 2011 rulings, the court held that the traffic analysis required further analysis in two areas: (1) traffic impacts associated with the loss of traffic lanes parallel to the Caltrain right-of-way in certain areas along the San Francisco Peninsula; and (2) traffic impacts from the narrowing of Monterey Highway from six lanes to four lanes for approximately 3.3 miles and impacts on surrounding streets resulting from the narrowing. The following new text addresses these areas, and adds to the 2008 Final Program EIR, Chapter 3.1. The information related to the narrowing of Monterey Highway supersedes the analysis in the 2010 Revised Final Program EIR. Additional analysis is also provided for the potential loss of traffic lanes along the Oakland to San Jose Corridor in the City of Hayward. Changes to text from the Partially 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.

3.1 Regulatory Requirements and Methods of Evaluation (addition to Section 3.1.1 of 2008 Final Program EIR)

The methodology and CEQA significance criteria presented in the 2008 Final Program EIR, Section 3.1.1 remain accurate and unchanged. The reader is referred to that document for additional context. The following discussion adds to the discussion of methodology and clarifies the method of assessing environmental impacts for the potential loss of traffic lanes parallel to the Caltrain right-of-way in the San Francisco to San Jose Corridor and the narrowing of traffic lanes on Monterey Highway. The following text is an addition to Section 3.1.1 of the 2008 Final Program EIR.

A. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE CALTRAIN RIGHT-OF-WAY ALONG THE SAN FRANCISCO PENINSULA

In a transportation context, a permanent impact occurs when the project's required right-of-way affects an adjacent roadway, such as when additional right-of-way is needed to provide sufficient width to physically accommodate the rail corridor. The permanent loss of roadway capacity can cause localized congestion, or can increase congestion on nearby roadways and intersections by causing a shift in traffic volume to parallel streets. A detailed traffic analysis identifying changes in local traffic patterns, intersection and roadway congestion, and construction-period road closures is not feasible at this stage of project development because the project design has not sufficiently progressed to determine these location-specific effects.

A number of roadways on the San Francisco Peninsula run directly alongside and adjacent to the existing Caltrain right-of-way. As it is anticipated that additional right-of-way would be required to construct and operate the four track configuration necessary to accommodate HST, Caltrain, and existing freight rail in the corridor, it is possible that lane closures may be required on limited segments of some of these roadways. For the level of design presently available, typical cross-section widths¹ were used to determine if lane closures were possible on these adjacent roadway segments. Data collected between ~~2008-2009~~ and ~~December-2011~~March 2012 was used to analyze the existing conditions on roadways and intersections adjacent to the rail corridor. The Metropolitan Transportation Commission's (MTC) travel demand model for the 2009 update to the Regional Transportation Plan (RTP) was used to project the future (2035) traffic volumes for those same

¹ This typical section width ranges from 75 feet for anticipated at-grade sections to 95 feet for a 4-track trench section.

adjacent roadways and intersections (MTC Model). Potential impacts associated with these closures are provided in an analysis that considers:

- Loss of access to properties along the roadway segment due to lane reductions.
- Volume/Capacity (V/C) ratios on these roadway segments and whether they have capacity to absorb the loss of a lane or lanes.
- Existing V/C ratios on alternate routes that motorists may use if V/C ratios on the affected roadway segments fall below an acceptable level of service.
- The potential to affect intersection level of service (LOS) at intersections that would be directly affected by lane closures, or at nearby intersections that would be likely to receive traffic diverted from roads with lane closures.

The traffic analyses in this section use a dual baseline approach. That is, the HST project's traffic impacts are evaluated using two scenarios. The first compares against current conditions ("existing" vs. "existing plus HST"). The second scenario compares impacts between future year background conditions with and without the project ("2035 No Project" vs. "2035 plus HST").²

The final step was to consider and augment the mitigation strategies identified in section 3.1.5 of the 2008 Final Program EIR. Once the project design has reached a sufficient level of definition, the subsequent project-level environmental analysis will evaluate location-specific impacts and necessary mitigation measures more precisely.

B. POTENTIAL NARROWING OF TRAFFIC LANES ON MONTEREY HIGHWAY AND IMPACTS ON SURROUNDING STREETS

Additional analysis is provided to determine the effect of narrowing Monterey Highway in the San Jose to Central Valley Corridor. Monterey Highway is planned to be narrowed from six lanes to four lanes from Southside Drive to Blossom Hill Road, a distance of about 3.3 miles (as shown in Figure 2-2). The reduction of capacity on Monterey Highway may cause congestion on the highway, and may increase congestion on the surrounding street network by causing a shift in traffic from the highway to surrounding streets. This analysis considers both these aspects of the narrowing, and the difference in the methodologies used to evaluate each aspect are explained below. Santa Clara Valley Travel Demand Model (VTA Model) from Spring 2011 was used to model the effects of the narrowing on Monterey Highway and the surrounding street network. The model does not take into account the trips taken off the road network by travelers shifting to the HST service.

The dual baseline approach discussed above was also used for Monterey Highway. Traffic conditions on Monterey Highway with and without the proposed narrowing were analyzed. The data included the projected traffic operating conditions under existing, existing plus HST, 2035 No Project and 2035 plus HST conditions.³ Impacts were determined by comparing the existing condition to existing plus HST condition and the 2035 No Project condition to the 2035 plus HST condition.

The traffic impacts that the HST project would have on the surrounding street network due to the narrowing of Monterey Highway are primarily dependent on two factors (1) traffic that is diverted from Monterey Highway to the surrounding street network due to the proposed narrowing and (2) traffic removed from this network because trips by automobile that would otherwise use the network

² The analysis in the 2008 Final Program EIR generally utilized the year 2030 to reflect future conditions and analyze project alternatives, including the No Project Alternative. The background conditions year used in this analysis of traffic impacts is 2035. The year 2030 continues to be referenced in this Partially Revised Draft Program EIR in some instances, and there are no significant differences in the level of major roadway improvements assumed to be in operation in 2035 as compared with 2030.

³ Existing conditions as modeled by the VTA Model reflect conditions in the year 2010.

are diverted to the HST. These factors were considered together to determine the potential traffic impacts on the region. The VTA Model was used to determine the amount of traffic diverted to neighboring streets and the route choice of the diverted traffic. The model reassigns the diverted traffic to roadways where capacity exists, insofar as the model's determination of residual traffic capacity, volume to capacity ratios, and resulting estimates of link speeds. It is not possible to determine the precise route choice of the traffic diverted from Monterey Highway due to the narrowing. For the purposes of this study, and based on professional experience, the route choices of the diverted traffic as determined by the VTA model are used.

Based on the VTA model, roadway segments projected to be operating at LOS E or worse during existing and 2035 peak hours and projected to experience an increase or decrease in traffic (100 trips or more) with HST due to the narrowing, were identified. This effect was considered along with traffic reduction in regional roadways due to mode shift from automobiles to HST to determine the impacts on the street network.

Mitigation strategies were identified to augment those identified in Section 3.1.5 of the 2008 Final Program EIR specifically as it relates to impacts on Monterey Highway and the surrounding street network. Once the project design has reached a sufficient level of definition, the subsequent project-level environmental analysis will evaluate location-specific impacts and necessary mitigation measures more precisely.

C. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE UPRR RIGHT-OF-WAY ALONG THE EAST BAY IN HAYWARD

Additional analysis is provided to determine the effect of the potential loss of a traffic lane on a limited stretch of roadway directly alongside and adjacent to the UPRR right-of-way in Hayward along the Oakland to San Jose Corridor. Additional right-of-way would be required to accommodate HST if UPRR right-of-way were unavailable. For the level of design presently available, typical cross-section widths were used to determine if a lane closures were possible.⁴

D. CEQA SIGNIFICANCE CRITERIA

Under CEQA, a proposed project should be analyzed for the potential effects listed below (California Department of Transportation 2003).

- An increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the V/C, or congestion at intersections).
- Either individually or cumulatively exceeding an LOS standard established by the county congestion management agency for designated roads or highways.
- A substantial increase in hazards attributable to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Inadequate parking capacity.
- Inadequate emergency access.
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).
- Rail, waterborne, or air traffic impacts.

⁴ Refer to Figure 3-2a of the 2010 Revised Final Program EIR.

Under CEQA, the proposed project would have a significant impact related to transportation and traffic if the project would result in:

- Substantial increase in traffic on roadways that exceeds the V/C.
- Substantial interference with goods movement.
- Substantial interference with or lack of connectivity with other transit systems.⁵

3.2 Affected Environment (addition to Section 3.1.2 of 2008 Final Program EIR)

The affected environment presented in the 2008 Final Program EIR, Section 3.1.2 remains accurate and unchanged. The reader is referred to that document for additional context. The following text is an addition to Section 3.1.2 of the 2008 Final Program EIR.

A. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE CALTRAIN RIGHT-OF-WAY ALONG THE SAN FRANCISCO PENINSULA

This corridor includes the areas on the west side of the San Francisco Bay along the Caltrain rail line, from the city of San Francisco to the city of San Jose. This is a highly urbanized area with higher density land uses surrounding the corridor that generates high volumes of regional and local automobile traffic on freeways, state highways, and on local roads.

The major intercity highway links in the corridor are the US 101 freeway links. Some freeway links in this corridor are very congested, operating at LOS E in generalized peak hour in the peak direction. This congestion extends to the local road network and many intersections in the area function at a relatively poor level of service, with long delays at traffic signals and high V/C ratios. In many areas along the corridor there are parallel roadways that flank the existing Caltrain right-of-way and many roads that cross the corridor, either at-grade at controlled (gated) crossings, or using grade-separated structures such as over and undercrossing. The level of service of these parallel and crossing roads and associated intersections varies greatly with many operating under free-flowing traffic conditions, and others that are affected by the peak hour congestion that is common in the region.

B. POTENTIAL NARROWING OF TRAFFIC LANES ON MONTEREY HIGHWAY AND IMPACTS ON SURROUNDING STREETS

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.

⁵ Inadequate parking capacity, addressed in the 2008 Final Program EIR, was removed from Appendix G of the CEQA Guidelines in 2010. Inadequate parking is no longer considered an environmental impact per se. Rather, this issue only falls within the purview of CEQA if there is substantial evidence that a significant secondary environmental impact may occur as a result of an identified lack of parking. Parking issues fall outside the scope of environmental review and are not required to be addressed as part of this Partially Revised Draft Program EIR. Parking demand and availability is considered part of the overall traffic congestion analysis as discussed below.

Each of the US 101 projects diverted traffic off Monterey Highway, so that currently the highway carries much less traffic than it was originally designed to support. As it was used as an original route for US 101, Monterey Highway is wider than an average arterial. The width of the six-lane portion of Monterey Highway from South side Drive to Blossom Hill Road varies from 105 to 125 feet, including outside shoulders. The existing peak hour roadway 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.⁶ 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.

C. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE UPRR RIGHT-OF-WAY ALONG THE EAST BAY IN HAYWARD

The Oakland to San Jose Corridor includes the areas on the east side of San Francisco Bay along I-880 from the City of Oakland to the City of San Jose. The area of potential lanes closures in the City of Hayward is bounded by East A Street, East Winton Avenue, and the UPRR right-of-way which operates freight traffic and also Amtrak Capitol Corridor passenger service. The areas immediately east and west of UPRR include newer residential development with local streets providing access.

3.3 Environmental Consequences (addition to Section 3.1.3 of 2008 Final Program EIR)

The environmental consequences discussion presented in the 2008 Final Program EIR, Section 3.1.3 remains accurate and unchanged. The reader is referred to that document for additional context. The following text is an addition to Section 3.1.3 of the 2008 Final Program EIR.

A. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE CALTRAIN RIGHT-OF-WAY ALONG THE SAN FRANCISCO PENINSULA

No Project Alternative

The programmed or funded major roadway improvements assumed to be in operation by 2030 include some capacity improvements to improve regional circulation and individual interchange function but generally no systemwide capacity improvements (e.g., major new highway construction) and would not result in a general improvement or stabilization of conditions of existing highways across the study area. Smaller local projects involving improvements to local roadways, intersections, and bicycle and pedestrian routes are generally not included in the 2030 No Project Alternative as these items are not programmed many years in advance. Many of these local projects would occur over the project study area and most of them would be related to the traffic generated by nearby development (such as a new traffic signal for a development). It is anticipated that these local improvements would have little or no impact on regional travel demand or capacity.

High-Speed Train Alternative

The HST corridor on the San Francisco Peninsula may impact adjacent roadways by requiring right-of-way from public streets to accommodate the HST project with existing Caltrain and freight service. If existing roadway capacity is removed, it could result in impacts that include additional traffic congestion during peak travel times, loss of on-street parking used by adjacent residents and businesses, changes in circulation patterns, and street closures. The potential lane closures

⁶VTA, Spring 2011.

discussed in this analysis include all possible closures identified with the available level of design. Through design modifications at the project EIR level, some of the closures assumed for this analysis may actually not be required. However, the following is provided as a conservative evaluation of the potential impacts of the HST project on adjacent streets due to removal of existing traffic lanes. Eight potential lane reductions along the following roadway segments were identified and are shown in Figure 3-1:

- One lane of Railroad Avenue between Monte Diablo and 3rd Avenue, in San Mateo, approximately 0.47 mile in length.
- One lane of Pacific Boulevard from Concar Drive to where the Pacific Boulevard alignment diverts from the railroad corridor toward Delaware Street, in San Mateo, approximately 0.27 mile in length.
- Up to four lanes of Pacific Boulevard at the Hillsdale Boulevard Interchange and one lane on Pacific Boulevard south from Hillsdale Boulevard to Laurie Meadows Drive, in San Mateo, approximately 0.81 mile in length.
- One to two lanes of Old County Road/Stafford Street from Quarry Road to McCue Avenue, from Cherry Street to Bransten Road, and from Brittan Avenue to Whipple Avenue, in San Carlos and Redwood City, approximately 1.91 miles in length from Quarry Road to Whipple Avenue.
- One lane of Alma Street between Oak Grove Avenue and Ravenswood Avenue, in Menlo Park, approximately 0.20 mile in length.
- One lane of Alma Street between Homer Avenue and Embarcadero Road and two lanes on Alma Street from Embarcadero Road to California Avenue, in Palo Alto, approximately 1.28 miles in length.
- One lane of Central Expressway between San Antonio Road and Rengstorff Avenue, in Mountain View, approximately 0.69 mile in length.
- One lane of Hendy Avenue between Sunnyvale Avenue and Fair Oaks Avenue, in Sunnyvale, approximately 0.46 mile in length.

This reduction in lanes may result in circulation, access, or parking impacts. Some of these impacts could include complete closure of streets with circulation diverted to surrounding roadways; conversion of two-way streets to one-way streets; increasing congestion and reduced levels of service as discussed below; changes to adjacent on-street bicycle facilities; limitations or elimination of access to some parcels; requirements for new frontage roads or new access routes; and reduction in on-street parking which could have secondary impacts related to land use viability. In some locations, there could be land use implications (acquisitions) resulting from mitigation for circulation and parking impacts.

For purposes of this programmatic analysis, and in light of the corridor being evaluated as a whole at the program level, an analysis of the potential traffic impacts for each of the eight potential lane reductions was conducted and is provided below. This analysis was based on AM (morning) and PM (evening) peak hour V/C and LOS calculations. The typical weekday AM and PM peak hours generally carry a greater amount of traffic than any other time period and are used to determine project impacts. ~~as PM peak conditions are generally more impacted than AM (morning) peak hour conditions in this region.~~ Table 3-1a and through Table 3-1d ~~1b~~ summarize the findings of the lane

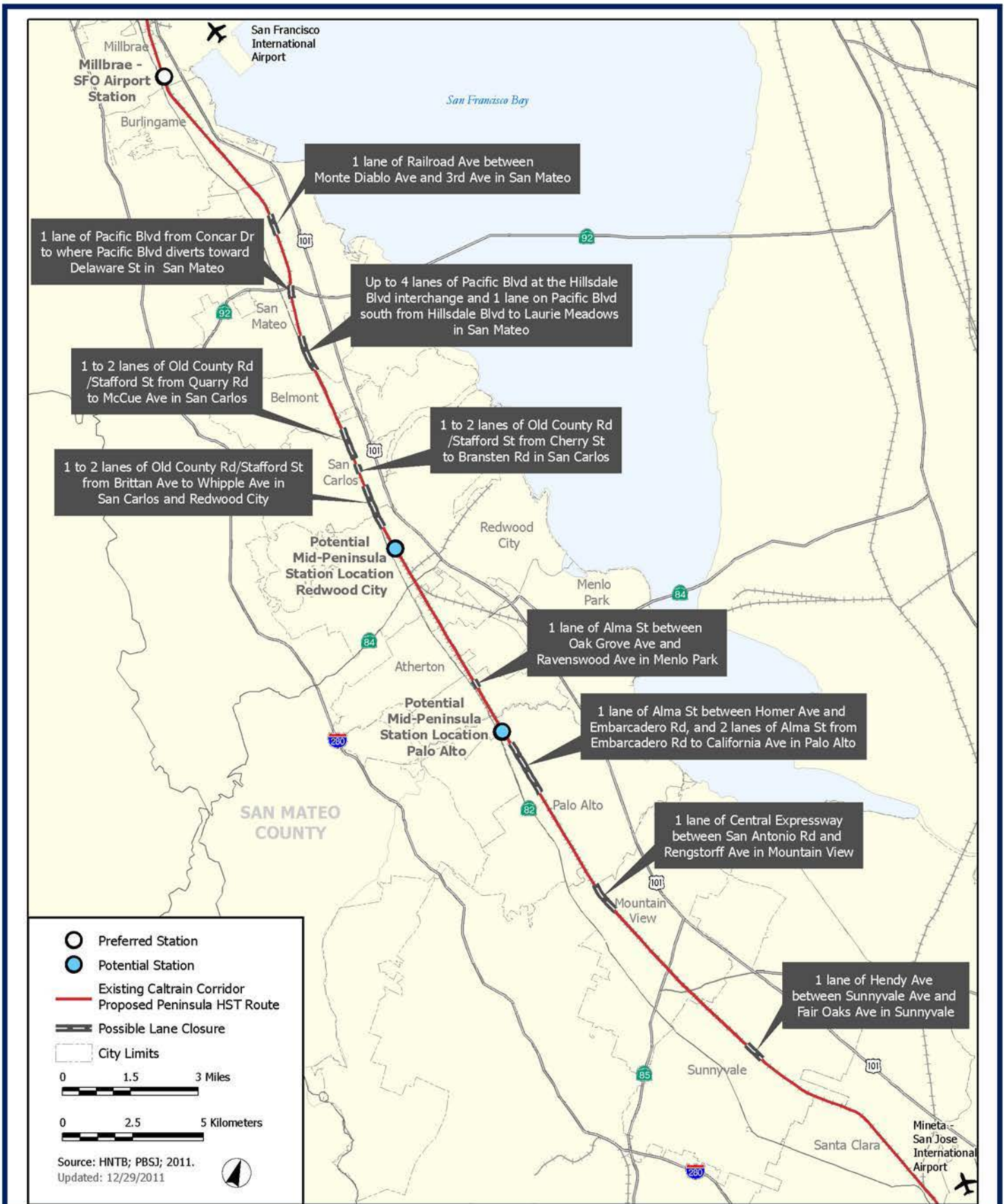


Figure 3-1
San Francisco to San Jose Possible Lane Closures
Bay Area to Central Valley HST Partially Revised Final Program EIR

closure analysis using the dual baseline approach discussed above (existing vs. existing plus HST, and 2035 No Project vs. 2035 plus HST).⁷

The analysis identified that the loss of parallel lanes in limited areas along the San Francisco to San Jose Corridor has the potential to cause ~~significant~~ traffic congestion at a number of intersections, such that this increased congestion would be considered a significant impact.⁸ As indicated in Table 3-1a, when comparing the existing conditions to existing conditions plus HST in the AM peak hour, there would be a significant increase in traffic congestion at the Churchill Avenue/Alma Street intersection. When comparing the anticipated AM peak hour future condition in 2035 without HST to the future condition in 2035 plus HST in Table 3-1b, there would be an increase in traffic congestion at a second intersection as well, Page Mill Road/El Camino Real. ~~the impact would be limited to the Ravenswood Avenue/Alma Street intersection (due to the loss of one traffic lane on Alma Street~~

~~In the PM peak hour, the congestion impact would be limited to two intersections, Ravenswood Avenue/Alma Street and Churchill Avenue/Alma Street, for existing conditions versus existing conditions plus HST (Table 3-1c). When comparing the anticipated future condition in 2035 without HST to the future condition in 2035 plus HST in (Table 3-1d), there would be a significant increase in traffic congestion at a number of areas experiencing a significant traffic congestion impact increases as a result of four areas of lane closures to include seven eight intersections: Hillside Boulevard/El Camino Real ramps (northbound and southbound), Brittan Avenue/El Camino Real, Howard Avenue/El Camino Real, Ravenswood Avenue/Alma Street, Embarcadero Road/El Camino Real, Churchill Avenue/Alma Street, and Page Mill Road/El Camino Real.~~

For purposes of this programmatic analysis, and in light of the corridor being evaluated as a whole at the program level, this increase in ~~impact is considered a new significant~~ traffic congestion is considered a new significant impact for the San Francisco to San Jose Corridor, even though the impact is limited to certain areas. However, if design refinement (at the project level) avoids these lane closures, impacts could be avoided and mitigation may not be required.

B. POTENTIAL TRAFFIC IMPACTS FROM THE NARROWING OF MONTEREY HIGHWAY FROM SIX TO FOUR LANES AND IMPACTS ON SURROUNDING STREETS

No Project Alternative

As discussed above in the Affected Environment, peak hour roadway LOS along Monterey Highway in the San Jose to Central Valley Corridor under existing conditions, without HST, 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, without HST, between Southside Drive and Bailey Road, indicate that traffic volumes are expected to be higher in the southbound direction than in the northbound 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. Many major roadways surrounding this stretch of Monterey Highway operate at LOS E or worse under the No Project Alternative.

⁷ All diverted traffic from these lane closures is assumed to be diverted to other local roads, which have been assessed for impacts. No trip reductions have been included for mode diversions from automobile to HST, as it is assumed that the majority of these trips are closely tied to nearby and adjacent land use. This represents the most conservative scenario.

⁸ To the extent any projected loss of parking from these lane closures increases or decreases traffic congestion, the lane closure analysis has taken into account projected loss of parking in determining the level of traffic impacts, as well as taking into account all other impacts of the lane closures as discussed above. In some instances, as shown in ~~the tables~~ Tables 3-1a and 3-1b, service is projected to improve with the project, based on changes in circulation patterns or future traffic improvements.

High-Speed Train Alternative

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 to south of Blossom Hill Road, and four lanes wide south of Blossom Hill Road. Monterey Highway from approximately Southside Drive to south of Blossom Hill Road (approximately 3.3 miles) 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. The San Jose Envision 2040 General Plan update was adopted by the City Council in November 2011, which made the modification of Monterey Highway official City policy. 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.

The reduction of lanes on a portion of Monterey Highway, together with HST, may create traffic impacts to Monterey Highway itself, as discussed immediately below. In addition, the narrowing of the Monterey Highway and HST may have traffic impacts on the local street network. These latter impacts, also discussed below, are considered along with the impacts of the mode shift from automobile to HST.

Effects of the Narrowing on Monterey Highway

With the reduction of lanes on a portion of Monterey Highway, traffic congestion on the Monterey Highway itself is projected to increase slightly in both directions. The VTA Model (Spring 2011) was used for conducting this analysis. The assumptions of this forecast consider a base scenario with Monterey Highway being six lanes from Southside Drive to south of Blossom Hill Road, and a project scenario with four lanes on Monterey Highway for this section. The forecast does not incorporate the mode shift to HST, and therefore represents a conservative scenario.

As shown in Table 3-2a, analyzing existing vs. existing plus HST conditions, traffic on this stretch of Monterey Highway peaks northbound during the morning peak hour and southbound during the evening peak hour. All segments of Monterey Highway between Southside Drive and Bailey Road operate at LOS D or better during existing peak hours, without the narrowing. Even with the narrowing, only two segments of Monterey Highway (between Capitol Expressway and Senter Road, and Senter Road and Branham Lane) are projected to degrade by one level of service to LOS E in the northbound direction during the morning peak hour. These potential impacts are significant. All other segments are projected to operate at LOS D or better, during both peak hours in both directions.

In 2035, even without the narrowing, two to four of the eight segments of Monterey Highway presented in Table 3-2b are projected to operate at LOS E or worse depending on the peak hour and travel direction. With the narrowing, one to five of the eight segments are projected to have potentially significant impacts, depending on the peak hour and travel direction.⁹ Thus, the narrowing of Monterey Highway is considered a new significant traffic impact for this specific 3.3 mile segment of Monterey Highway.

⁹ These impacts are based on modeling conducted using the VTA's latest model as of Spring 2011 and hence are different from the impacts presented in the 2010 Revised Final Program EIR, which used an earlier version of the VTA model.

Table 3-1a
San Francisco to San Jose High Speed Train Corridor
Possible Lane Closures Existing Conditions Scenario Analysis
AM Peak Hour Levels of Service and Vehicle Delay

Potential Lane Reductions and Segments and Intersections Analyzed	Existing¹		Existing + HST		Existing to Existing +HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 lane of Pacific Blvd. from Concar Dr. to where the Pacific Blvd. alignment diverts from the railroad corridor					
19 th Ave/Pacific Blvd	A	7.3	A	0	LTS
19 th Ave/Delaware St	C	26.1	C	26.3	LTS
Pacific Blvd/Delaware St	B	14.3	B	14.2	LTS
Up to 4 lanes of Pacific Blvd. at the Hillsdale Blvd. Interchange and 1 lane on Pacific Blvd. south from Hillsdale Blvd. to Laurie Meadows Dr.#					
Hillsdale Blvd WB Ramps/Pacific Blvd	A	8.3	NA	NA	NA
Hillsdale Blvd EB Ramps/Pacific Blvd	A	8.7	NA	NA	NA
Hillsdale Blvd/Pacific Blvd (at-grade)	NA	NA	C	28.3	LTS
Hillsdale Blvd/EI Camino Real NB Ramps	D	39.5	D	37.6	LTS
Hillsdale Blvd/EI Camino Real SB Ramps	C	34.2	C	31.4	LTS
42nd Ave/Pacific Blvd	C	32.7	B	18.3	LTS
42nd Ave/EI Camino Real	C	30.2	C	27.9	LTS
1 to 2 lanes of Old County Rd. and Stafford St. from Quarry Rd. to McCue Ave., from Cherry St. to Bransten Rd., and from Brittan Ave. to Whipple Ave.					
Harbor Blvd/Old County Rd	C	25.6	C	26.1	LTS
Harbor Blvd/EI Camino Real	B	19.7	C	21.5	LTS
Holly St/Old County Rd	C	34.7	C	29.6	LTS
Holly St/EI Camino Real	D	36.4	D	39.5	LTS
Brittan Ave/Old County Rd	C	27.3	C	27.5	LTS
Brittan Ave/EI Camino Real	D	37.6	D	40.6	LTS
Howard Ave/Old County Rd	C	24.5	C	23.4	LTS
Howard Ave/EI Camino Real	C	30.7	C	34.6	LTS
Whipple Ave/EI Camino Real	C	34.7	D	36	LTS
Whipple Ave/Stafford St	B	11.4	A	0	LTS
1 traffic lane on Alma St. between Oak Grove Ave. and Ravenswood Ave.					
Oak Grove Ave/Alma St	B	14.7	A	8.3	LTS
Oak Grove Ave/EI Camino Real	C	28.5	C	28.3	LTS
Ravenswood Ave/Alma St	D	31.5	D	31.6	LTS
Ravenswood Ave/EI Camino Real	D	39.6	D	39.5	LTS

Potential Lane Reductions and Segments and Intersections Analyzed	Existing¹		Existing + HST		Existing to Existing +HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 traffic lane of Alma St. between Homer Ave. to Embarcadero Rd. and 2 traffic lanes on Alma St. from Embarcadero Rd. to California Ave.					
University Ave / El Camino Real NB Ramps [East]	B	14.2	C	23.9	LTS
Palm Dr / El Camino Real SB Ramps [West]	C+	21.3	C+	21.9	LTS
Homer Ave/Alma St	A	6.8	A	6.5	LTS
Embarcadero Rd/El Camino Real	D	39.2	D	39.1	LTS
Churchill Ave/Alma St	D	42.0	E+	55.8	S
Page Mill Rd/El Camino Real	D	50.6	E-	76	LTS
1 lane of Central Expressway between San Antonio Rd. and Rengstorff Ave.					
SB Central Expy between San Antonio Rd and Rengstorff Ave	A	833/3800** = 0.22	A	833/1900 = 0.44	LTS
1 lane of Hendy Ave. between Sunnyvale Ave. and Fair Oaks Ave.					
Sunnyvale Ave/Hendy Ave	B+	11.7	B+	11.6	LTS
Sunnyvale Ave/Evelyn Ave	C	30.9	C	30.8	LTS
Fair Oaks Ave/Evelyn Ave	C	24.8	C	26.7	LTS
* Project Impact: LTS (less than significant); S (significant)					
# A loss of four lanes of Pacific Blvd at the Pacific Blvd/Hillsdale Blvd interchange would eliminate the interchange. It is assumed that the interchange will be rebuilt as an at-grade intersection further east, and thus the existing + project for the rebuilt, at-grade intersection is compared with existing conditions for the current interchange.					
** Assumed base capacity per lane is 1900 vph.					
Notes:					
1. The existing traffic volumes used in the analysis were collected in 2008, 2009, 2010, and 2012.					
2. Traffic re-routing to represent possible lane closures were determined by AECOM. A conservative approach was employed to shift diverted traffic onto the most likely parallel facility rather than disperse the diverted traffic to several parallel facilities. This approach increased the likelihood of identifying a significant impact as a result of the possible lane closures.					
3. Intersection Delay, V/C, and Level of Service were determined using the TRAFFIX 8.0 computer program. TRAFFIX is a commonly used software package in the Bay Area and is consistent with the procedures of the Highway Capacity Manual.					

**Table 3-1b
San Francisco to San Jose High Speed Train Corridor
Possible Lane Closures 2035 Baseline Scenario Analysis
AM Peak Hour Levels of Service and Vehicle Delay**

Potential Lane Reductions and Segments and Intersections Analyzed	2035 No Project¹		2035 + HST		2035 No Project to + HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 lane of Pacific Blvd. from Concar Dr. to where the Pacific Blvd. alignment diverts from the railroad corridor					
19 th Ave/Pacific Blvd	A	7.3	A	0	LTS
19 th Ave/Delaware St	C	28.4	C	28.7	LTS
Pacific Blvd/Delaware St	C	15.6	C	15.5	LTS
Up to 4 lanes of Pacific Blvd. at the Hillsdale Blvd. Interchange and 1 lane on Pacific Blvd. south from Hillsdale Blvd. to Laurie Meadows Dr. #					
Hillsdale Blvd WB Ramps/Pacific Blvd	A	8.8	NA	NA	NA
Hillsdale Blvd EB Ramps/Pacific Blvd	A	9.5	NA	NA	NA
Hillsdale Blvd/Pacific Blvd (at-grade)	NA	NA	C	31.4	LTS
Hillsdale Blvd/El Camino Real NB Ramps	D	46.2	D	46.6	LTS
Hillsdale Blvd/El Camino Real SB Ramps	C	34.2	C	32	LTS
42nd Ave/Pacific Blvd	D	36.5	B	18.3	LTS
42nd Ave/El Camino Real	C	32.2	C	29.7	LTS
1 to 2 lanes of Old County Rd. and Stafford St. from Quarry Rd. to McCue Ave., from Cherry St. to Bransten Rd., and from Brittan Ave. to Whipple Ave.					
Harbor Blvd/Old County Rd	C	26.1	C	27.6	LTS
Harbor Blvd/El Camino Real	C	21.1	C	23.1	LTS
Holly St/Old County Rd	D	40.3	D	40.3	LTS
Holly St/El Camino Real	D	40.1	D	45.5	LTS
Brittan Ave/Old County Rd	C	28.1	C	30.2	LTS
Brittan Ave/El Camino Real	D	40.1	D	46.3	LTS
Howard Ave/Old County Rd	C	24.4	C	23.7	LTS
Howard Ave/El Camino Real	C	31.2	D	37.5	LTS
Whipple Ave/El Camino Real	D	41.6	D	44.6	LTS
Whipple Ave/Stafford St	B	12.3	A	0	LTS

Potential Lane Reductions and Segments and Intersections Analyzed	2035 No Project ¹		2035 + HST		2035 No Project to + HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 traffic lane on Alma St. between Oak Grove Ave. and Ravenswood Ave.					
Oak Grove Ave/Alma St	C	16.6	A	8.6	LTS
Oak Grove Ave/El Camino Real	C	29.8	C	29.5	LTS
Ravenswood Ave/Alma St	E	40.8	E	42.5	LTS
Ravenswood Ave/El Camino Real	D	46.6	D	46.4	LTS
1 traffic lane of Alma St. between Homer Ave. to Embarcadero Rd. and 2 traffic lanes on Alma St. from Embarcadero Rd. to California Ave.					
University Ave / El Camino Real NB Ramps [East]	B	15.8	C	30.8	LTS
Palm Dr / El Camino Real SB Ramps [West]	C+	21.4	C+	22.2	LTS
Homer Ave/Alma St	A	7.4	A	6.9	LTS
Embarcadero Rd/El Camino Real	D	46.5	D	49.5	LTS
Churchill Ave/Alma St	E+	55.7	F	89.5	S
Page Mill Rd/El Camino Real	E-	79.3	F	132.6	S
1 lane of Central Expressway between San Antonio Rd. and Rengstorff Ave.					
SB Central Expy between San Antonio Rd and Rengstorff Ave	A	1032/3800** = 0.27	A	1032/1900 = 0.54	LTS
1 lane of Hendy Ave. between Sunnyvale Ave. and Fair Oaks Ave.					
Sunnyvale Ave/Hendy Ave	B+	11.8	B+	11.7	LTS
Sunnyvale Ave/Evelyn Ave	C	31.6	C	31.4	LTS
Fair Oaks Ave/Evelyn Ave	C	26.2	C	28.6	LTS

* Project Impact: LTS (less than significant); S (significant)

A loss of four lanes of Pacific Blvd at the Pacific Blvd/Hillsdale Blvd interchange would eliminate the interchange. It is assumed that the interchange will be rebuilt as an at-grade intersection further east, and thus the 2035 Plus Project conditions for the rebuilt, at-grade intersection is compared with 2035 Baseline conditions for the current interchange.

** Assumed base capacity per lane is 1900 vph.

Notes:

1. The existing traffic volumes used in the analysis were collected in 2008, 2009, 2010, and 2012.
2. The future traffic projections were obtained from the MTC Regional Travel Demand Model. These projections were post-processed by AECOM to arrive at future intersection turning movement volumes.
3. Traffic re-routing to represent possible lane closures were determined by AECOM. A conservative approach was employed to shift diverted traffic onto the most likely parallel facility rather than disperse the diverted traffic to several parallel facilities. This approach increased the likelihood of identifying a significant impact as a result of the possible lane closures.
4. Intersection Delay, V/C, and Level of Service were determined using the TRAFFIX 8.0 computer program. TRAFFIX is a commonly used software package in the Bay Area and is consistent with the procedures of the Highway Capacity Manual.

Table 3-1a-1c
San Francisco to San Jose High Speed Train Corridor
Possible Lane Closures Existing Conditions Scenario Analysis
PM Peak Hour Levels of Service and Vehicle Delay

Potential Lane Reductions and Segments and Intersections Analyzed	Existing ¹		Existing + HST		Existing to Existing + HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 lane of Pacific Blvd. from Concar Dr. to where the Pacific Blvd. alignment diverts from the railroad corridor					
19 th Ave/Pacific Blvd	A	7.3	A	0.0	LTS
19 th Ave/Delaware St	C	28.3	C	28.6	LTS
Pacific Blvd/Delaware St	C	16.5	C	16.6	LTS
Up to 4 lanes of Pacific Blvd. at the Hillsdale Blvd. Interchange and 1 lane on Pacific Blvd. south from Hillsdale Blvd. to Laurie Meadows Dr.[#]					
Hillsdale Blvd WB Ramps/Pacific Blvd	A	8.9	NA	NA	NA
Hillsdale Blvd EB Ramps/Pacific Blvd	A	8.8	NA	NA	NA
Hillsdale Blvd/Pacific Blvd (at-grade)	NA	NA	C	26.6	LTS
Hillsdale Blvd/EI Camino Real NB Ramps	D	43.1	D	44.7	LTS
Hillsdale Blvd/EI Camino Real SB Ramps	D	37.4	D	43.9	LTS
42nd Ave/Pacific Blvd	D	44.2	C	21.5	LTS
42nd Ave/EI Camino Real	C	31.4	C	28.4	LTS
1 to 2 lanes of Old County Rd. and Stafford St. from Quarry Rd. to McCue Ave., from Cherry St. to Bransten Rd., and from Brittan Ave. to Whipple Ave.					
Harbor Blvd/Old County Rd	C	25.2	C	27.1	LTS
Harbor Blvd/EI Camino Real	C	27.6 26.2	C	28.3 26.8	LTS
Holly St/Old County Rd	D	43.5	C	34.4	LTS
Holly St/EI Camino Real	C	34.8	D	37.2	LTS
Brittan Ave/Old County Rd	C	33.2	D	36.3	LTS
Brittan Ave/EI Camino Real	D	48.2 38.7	D	54.9 44.7	LTS
Howard Ave/Old County Rd	C	32.2	C	34.0	LTS
Howard Ave/EI Camino Real	C	32.5	D	38.3	LTS
Whipple Ave/EI Camino Real	D	39.3	D	40.5	LTS
Whipple Ave/Stafford St	B	14.1	A	0.0	LTS
1 traffic lane on Alma St. between Oak Grove Ave. and Ravenswood Ave.					
Oak Grove Ave/Alma St	C	18.1	B	12.4	LTS
Oak Grove Ave/EI Camino Real	C	30.8	C	29.9	LTS
Ravenswood Ave/Alma St	F	77.9	F	108.0	S
Ravenswood Ave/EI Camino Real	D	45.2	D	45.8	LTS

Potential Lane Reductions and Segments and Intersections Analyzed	Existing ¹		Existing + HST		Existing to Existing + HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 traffic lane of Alma St. between Homer Ave. to Embarcadero Rd. and 2 traffic lanes on Alma St. from Embarcadero Rd. to California Ave.					
University Ave / El Camino Real NB Ramps [East]	C+	21.2	C	28.1	LTS
Palm Dr / El Camino Real SB Ramps [West]	C	24.4	C	29.1	LTS
Homer Ave/Alma St	B+	11.4	A	9.9	LTS
Embarcadero Rd/El Camino Real	D	48.7	E	60.4	LTS
Churchill Ave/Alma St	C E+	25.0 56.4	C E	32.6 72.6	LTS S
Page Mill Rd/El Camino Real	D	49.1	E	63.2	LTS
1 lane of Central Expressway between San Antonio Rd. and Rengstorff Ave.					
SB Central Expy between San Antonio Rd and Rengstorff Ave	A	1330/3800** = 0.35	B	1330/1900 = 0.70	LTS
1 lane of Hendy Ave. between Sunnyvale Ave. and Fair Oaks Ave.					
Sunnyvale Ave/Hendy Ave	B	13.4	B	12.2	LTS
Sunnyvale Ave/Evelyn Ave	C-	32.2	C-	32.2	LTS
Fair Oaks Ave/Evelyn Ave	C	28.1	C	29.5	LTS
<p>* Project Impact: LTS (less than significant); S (significant)</p> <p># A loss of four lanes of Pacific Blvd at the Pacific Blvd/Hillsdale Blvd interchange would eliminate the interchange. It is assumed that the interchange will be rebuilt as an at-grade intersection further east, and thus the 2035 Plus Project conditions for the rebuilt, at-grade intersection is compared with 2035 Baseline conditions for the current interchange.</p> <p>** Assumed base capacity per lane is 1900 vph.</p> <p>Notes:</p> <ol style="list-style-type: none"> The existing traffic volumes used in the analysis were collected in 2009, 2010, and 2011, and 2012 Traffic re-routing to represent possible lane closures were determined by AECOM. A conservative approach was employed to shift diverted traffic onto the most likely parallel facility rather than disperse the diverted traffic to several parallel facilities. This approach increased the likelihood of identifying a significant impact as a result of the possible lane closures. Intersection Delay, V/C, and Level of Service were determined using the TRAFFIX 8.0 computer program. TRAFFIX is a commonly used software package in the Bay Area and is consistent with the procedures of the Highway Capacity Manual. 					

Table 3-1b-1d
San Francisco to San Jose High Speed Train Corridor
Possible Lane Closures 2035 Baseline Scenario Analysis
PM Peak Hour Levels of Service and Vehicle Delay

Potential Lane Reductions and Segments and Intersections Analyzed	2035 No Project ¹		2035 + HST		2035 No Project to + HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 lane of Pacific Blvd. from Concar Dr. to where the Pacific Blvd. alignment diverts from the railroad corridor					
19 th Ave/Pacific Blvd	A	7.3	A	0.0	LTS
19 th Ave/Delaware St	C	32.5	C	33.3	LTS
Pacific Blvd/Delaware St	C	21.3	C	20.8	LTS
Up to 4 lanes of Pacific Blvd. at the Hillsdale Blvd. Interchange and 1 lane on Pacific Blvd. south from Hillsdale Blvd. to Laurie Meadows Dr. #					
Hillsdale Blvd WB Ramps/Pacific Blvd	A	9.5	NA	NA	NA
Hillsdale Blvd EB Ramps/Pacific Blvd	A	9.3	NA	NA	NA
Hillsdale Blvd/Pacific Blvd (at-grade)	NA	NA	C	30.9	LTS
Hillsdale Blvd/El Camino Real NB Ramps	D	48.8	E	64.4	S
Hillsdale Blvd/El Camino Real SB Ramps	D	39.4	E	75.0	S
42nd Ave/Pacific Blvd	E	68.9	C	22.9	LTS
42nd Ave/El Camino Real	D	37.5	C	34.0	LTS
1 to 2 lanes of Old County Rd. and Stafford St. from Quarry Rd. to McCue Ave., from Cherry St. to Bransten Rd., and from Brittan Ave. to Whipple Ave.					
Harbor Blvd/Old County Rd	C	26.3	D	42.9	LTS
Harbor Blvd/El Camino Real	D C	36.4 32.8	D	39.8 35.2	LTS
Holly St/Old County Rd	D	51.3	D	53.9	LTS
Holly St/El Camino Real	D	38.3	D	45.9	LTS
Brittan Ave/Old County Rd	C	34.9	D	41.6	LTS
Brittan Ave/El Camino Real	F D	88.2 46.6	F E	129.4 75.6	S
Howard Ave/Old County Rd	C	33.3	D	36.8	LTS
Howard Ave/El Camino Real	D	37.1	E	57.7	S
Whipple Ave/El Camino Real	E	73.4	E	76.9	LTS
Whipple Ave/Stafford St	C	17.0	A	0.0	LTS

Potential Lane Reductions and Segments and Intersections Analyzed	2035 No Project ¹		2035 + HST		2035 No Project to + HST Impact*
	LOS	Delay or V/C	LOS	Delay or V/C	
1 traffic lane on Alma St. between Oak Grove Ave. and Ravenswood Ave.					
Oak Grove Ave/Alma St	C	23.1	B	13.5	LTS
Oak Grove Ave/El Camino Real	C	33.4	C	32.4	LTS
Ravenswood Ave/Alma St	F	190.2	F	319.4	S
Ravenswood Ave/El Camino Real	E	65.6	E	65.9	LTS
1 traffic lane of Alma St. between Homer Ave. to Embarcadero Rd. and 2 traffic lanes on Alma St. from Embarcadero Rd. to California Ave.					
University Ave / El Camino Real NB Ramps [East]	C+	22.3	D	42.7	LTS
Palm Dr / El Camino Real SB Ramps [West]	C	26.8	C-	33.9	LTS
Homer Ave/Alma St	B	12.5	B+	11.2	LTS
Embarcadero Rd/El Camino Real	E	71.6	F	104.9	S
Churchill Ave/Alma St	<u>C</u> <u>E</u>	<u>30.3</u> <u>64.7</u>	<u>D</u> <u>F</u>	<u>48.6</u> <u>86.2</u>	<u>LTS</u> <u>S</u>
Page Mill Rd/El Camino Real	E	66.5	F	109.0	S
1 lane of Central Expressway between San Antonio Rd. and Rengstorff Ave.					
SB Central Expy between San Antonio Rd and Rengstorff Ave	A	1698/3800** = 0.45	D	1698/1900 = 0.89	LTS
1 lane of Hendy Ave. between Sunnyvale Ave. and Fair Oaks Ave.					
Sunnyvale Ave/Hendy Ave	B	13.7	B	12.5	LTS
Sunnyvale Ave/Evelyn Ave	C-	33.6	C-	33.7	LTS
Fair Oaks Ave/Evelyn Ave	C	30.7	C-	32.2	LTS
<p>* Project Impact: LTS (less than significant); S (significant)</p> <p># A loss of four lanes of Pacific Blvd at the Pacific Blvd/Hillsdale Blvd interchange would eliminate the interchange. It is assumed that the interchange will be rebuilt as an at-grade intersection further east, and thus the 2035 Plus Project conditions for the rebuilt, at-grade intersection is compared with 2035 Baseline conditions for the current interchange.</p> <p>** Assumed base capacity per lane is 1900 vph.</p> <p>Notes:</p> <ol style="list-style-type: none"> The existing traffic volumes used in the analysis were collected in 2009, 2010, and 2011, and 2012 The future traffic projections were obtained from the MTC Regional Travel Demand Model. These projections were post-processed by AECOM to arrive at future intersection turning movement volumes. Traffic re-routing to represent possible lane closures were determined by AECOM. A conservative approach was employed to shift diverted traffic onto the most likely parallel facility rather than disperse the diverted traffic to several parallel facilities. This approach increased the likelihood of identifying a significant impact as a result of the possible lane closures. Intersection Delay, V/C, and Level of Service were determined using the TRAFFIX 8.0 computer program. TRAFFIX is a commonly used software package in the Bay Area and is consistent with the procedures of the Highway Capacity Manual. 					

**Table 3-2a
Existing Peak Hour Traffic Conditions on Monterey Highway
With and Without the Narrowing**

Monterey Highway Segment		Northbound							Southbound							
		Existing ¹			Existing + HST ²			Impact ³	Existing ¹			Existing + HST ²			Impact ³	
From	To	Volume	V/C	LOS	Volume	V/C	LOS		Volume	V/C	LOS	Volume	V/C	LOS		Volume
Morning Peak Hour																
Southside Dr.	Capitol Expy.	2,213	0.78	C	1,683	0.89	D	LTS	307	0.11	A	304	0.16	A	LTS	
Capitol Expy.	Senter Rd.	2,396	0.84	D	1,863	0.98	E	S	444	0.16	A	450	0.24	A	LTS	
Senter Rd.	Branham Ln.	2,281	0.8	D	1,725	0.91	E	S	460	0.16	A	462	0.24	A	LTS	
Branham Ln.	Chynoweth Ave.	1,951	0.68	B	1,509	0.79	C	LTS	425	0.15	A	423	0.22	A	LTS	
Chynoweth Ave.	Blossom Hill Rd.	1,656	0.58	A	1,304	0.69	B	LTS	708	0.25	A	717	0.38	A	LTS	
Blossom Hill Rd.	Bernal Rd.	1,007	0.35	A	956	0.33	A	LTS	242	0.08	A	240	0.08	A	LTS	
Bernal Rd.	Metcalf Rd.	2,218	0.74	C	2,205	0.74	C	LTS	279	0.09	A	279	0.09	A	LTS	
Metcalf Rd.	Bailey Rd.	1,760	0.59	A	1,745	0.58	A	LTS	73	0.02	A	70	0.02	A	LTS	
Evening Peak Hour																
Southside Dr.	Capitol Expy.	503	0.18	A	496	0.26	A	LTS	2,008	0.7	C	1,637	0.86	D	LTS	
Capitol Expy.	Senter Rd.	581	0.2	A	566	0.3	A	LTS	2,038	0.72	C	1,617	0.85	D	LTS	
Senter Rd.	Branham Ln.	581	0.2	A	574	0.3	A	LTS	1,951	0.68	B	1,534	0.81	D	LTS	
Branham Ln.	Chynoweth Ave.	564	0.2	A	552	0.29	A	LTS	1,385	0.49	A	1,182	0.62	B	LTS	
Chynoweth Ave.	Blossom Hill Rd.	886	0.31	A	869	0.46	A	LTS	1,262	0.44	A	1,072	0.56	A	LTS	
Blossom Hill Rd.	Bernal Rd.	281	0.1	A	277	0.1	A	LTS	736	0.25	A	662	0.23	A	LTS	
Bernal Rd.	Metcalf Rd.	506	0.17	A	502	0.17	A	LTS	1,189	0.4	A	1,170	0.39	A	LTS	
Metcalf Rd.	Bailey Rd.	252	0.08	A	244	0.08	A	LTS	744	0.25	A	722	0.24	A	LTS	

Source: VTA Model, Spring 2011.

V/C = volume-to-capacity ratio.

¹ Base - Monterey Highway - 6 lanes from Southside Drive to Blossom Hill Road, 4 lanes from Blossom Hill Road to Bailey Road

Project - Monterey Highway - 4 lanes from Southside Drive to Bailey Road

² Does not account for trips that would be diverted from auto to high-speed train

³ Impact: LTS (less than significant); S (significant)

**Table 3-2b
2035 Peak Hour Traffic Conditions on Monterey Highway
With and Without the Narrowing**

Monterey Highway Segment		Northbound							Southbound						
		2035 No Project ¹			2035 + Project ²				Impact ³	2035 No Project ¹			2035 + Project ²		
From	To	Volume	V/C	LOS	Volume	V/C	LOS	Impact ³		Volume	V/C	LOS	Volume	V/C	LOS
Morning Peak Hour															
Southside Dr.	Capitol Expy.	2,311	0.81	D	1,835	0.97	E	S	1,378	0.48	A	1,222	0.64	B	LTS
Capitol Expy.	Senter Rd.	2,667	0.94	E	1,936	1.02	F	S	2,122	0.74	C	1,568	0.83	D	LTS
Senter Rd.	Branham Ln.	2,481	0.87	D	1,824	0.96	E	S	2,039	0.72	C	1,486	0.78	C	LTS
Branham Ln.	Chynoweth Ave.	2,600	0.91	E	1,845	0.97	E	LTS	2,337	0.82	D	1,696	0.89	D	LTS
Chynoweth Ave.	Blossom Hill Rd.	2,393	0.84	D	1,913	1.01	F	S	2,488	0.87	D	1,866	0.98	E	S
Blossom Hill Rd.	Bernal Rd.	1,721	0.59	A	1,750	0.6	B	LTS	1,978	0.68	B	2,032	0.7	C	LTS
Bernal Rd.	Metcalf Rd.	3,206	1.07	F	3,171	1.06	F	LTS	3,006	1	F	2,925	0.98	E	LTS
Metcalf Rd.	Bailey Rd.	2,653	0.88	D	2,549	0.85	D	LTS	2,960	0.99	E	2,971	0.99	E	LTS
Evening Peak Hour															
Southside Dr.	Capitol Expy.	1,726	0.61	B	1,368	0.72	C	LTS	2,401	0.84	D	1,854	0.98	E	S
Capitol Expy.	Senter Rd.	2,178	0.76	C	1,551	0.82	D	LTS	2,597	0.91	E	1,840	0.97	E	LTS
Senter Rd.	Branham Ln.	2,137	0.75	C	1,527	0.8	D	LTS	2,511	0.88	D	1,781	0.94	E	S
Branham Ln.	Chynoweth Ave.	2,620	0.92	E	1,807	0.95	E	LTS	2,514	0.88	D	1,846	0.97	E	S
Chynoweth Ave.	Blossom Hill Rd.	2,737	0.96	E	1,963	1.03	F	S	2,244	0.79	C	1,844	0.97	E	S
Blossom Hill Rd.	Bernal Rd.	2,235	0.77	C	2,329	0.8	D	LTS	2,118	0.73	C	2,238	0.77	C	LTS
Bernal Rd.	Metcalf Rd.	3,321	1.11	F	3,349	1.12	F	LTS	2,869	0.96	E	2,914	0.97	E	LTS
Metcalf Rd.	Bailey Rd.	3,226	1.08	F	3,240	1.08	F	LTS	2,622	0.87	D	2,689	0.9	E	S

Source: VTA Model, Spring 2011.

V/C = volume-to-capacity ratio.

¹ Base - Monterey Highway - 6 lanes from Southside Drive to Blossom Hill Road, 4 lanes from Blossom Hill Road to Bailey Road

Project - Monterey Highway - 4 lanes from Southside Drive to Bailey Road

² Does not account for trips that would be diverted from auto to high-speed train

³ Impact: LTS (less than significant); S (significant)

Effects of Monterey Highway Narrowing on Surrounding Streets

The traffic impacts that the HST Project would have on the street network due to the narrowing of Monterey Highway from Southside Drive to Blossom Hill Road are primarily dependent on two factors (1) traffic that is diverted from the Monterey Highway to the surrounding street network due to the proposed narrowing and (2) traffic diverted from the region to the HST. These factors are presented together in order to analyze the potential traffic impacts on the region.

Traffic Diverted from Monterey Highway

Traffic Diversions - The potential effects of Monterey Highway narrowing on the surrounding roadway network were modeled using the spring 2011 VTA model. The model does not take into account the trips taken off the road network by travelers shifting to the HST service. The Monterey Highway study corridor includes major roadways surrounding the narrowed portion of Monterey Highway as shown in the following figures.

Figures 3-2a and 3-3a show existing condition roadway segments projected to operate at LOS E or worse (red bands) during the morning and evening peak hour respectively. These figures reflect the roadway network without the narrowing of Monterey Highway. Based on the model, about 500 to 600 vehicles per hour per direction would be diverted from Monterey Highway to other facilities during the peak hour, as a result of the proposed narrowing. Yellow bands in Figures 3-2b and 3-3b indicate roadways which would operate at LOS E or worse under existing conditions and would also experience an increase in traffic (100 trips or more) in existing plus HST conditions, due to the proposed narrowing. Links projected to operate at LOS C or better under existing conditions and projected to decline to LOS E or worse in existing plus HST conditions, are also denoted by yellow bands. Green bands in the figures represent links projected to operate at LOS E or worse in existing conditions where traffic volumes would be expected to decrease (by 100 trips or more) in existing plus HST conditions.

As can be seen from these figures, under existing conditions during the AM peak hour, only three roadway segments (segments of SR 87 and US 101) which operate at LOS E or worse in the existing conditions scenario are projected to experience increased traffic volume (100 trips or more) in existing plus HST conditions due to the narrowing. In the evening peak hour, none of the roadway segments which operate at LOS E or worse would experience an increase in traffic volume (100 trips or more) in existing plus HST conditions due to the narrowing.

In comparison, the effect due to the narrowing of Monterey Highway on the surrounding street network is projected to be more pronounced in 2035. Figures 3-4a and 3-5a show 2035 No Project roadway segments projected to operate at LOS E or worse (red bands) during the morning and evening peak hour respectively. These figures reflect the roadway network without the narrowing of Monterey Highway. As shown in the figures, several roadways are projected to operate under congested traffic conditions during the 2035 peak hours without the narrowing (with the evening peak hour being more congested of the two).

Based on the model, approximately 700 to 800 vehicles per hour per direction would be diverted from Monterey Highway to other facilities during the 2035 peak hour in 2035 plus HST conditions, as a result of the proposed narrowing. The addition of traffic to roadways already operating at LOS E or worse could lead to substantial traffic impacts. Yellow bands shown in Figures 3-4b and 3-5b indicate roadways which would operate at LOS E or worse under the 2035 No Project conditions and would also experience an increase in traffic (100 trips or more) in 2035 plus HST conditions due to the proposed narrowing. Links projected to operate at LOS C or better under the 2035 No Project conditions and projected to decline to LOS E or worse in 2035 plus HST conditions due to the additional traffic, are also denoted by yellow bands. Green bands in the figures represent links

projected to operate at LOS E or worse in the 2035 plus HST scenario where traffic volumes would be expected to decrease (by 100 trips or more).

In summary, traffic volumes are expected to decline on Monterey Highway as a result of less capacity. As travelers shift route choices additional results of this shift would include slower speeds on Monterey Highway, and an increase in traffic volumes on other nearby roadways. Some of these roadways, primarily the major freeways, would operate under congested conditions in the base scenario and the additional traffic could lead to significant impacts. These roadways include US 101, I-280, SR-87 and SR-85.

While many of these traffic volume changes shown in the figures due to the narrowing are logical, some differences, farther afield from Monterey Highway, are less so. The reason for these traffic volume differences is due to the sensitivity of the VTA model to minor network changes anywhere in the system of roadways, given the high levels of traffic assigned to the peak hours. When minor changes are made to an otherwise saturated network in a traffic model, false indications of significant impacts are a possible result. Therefore, while the VTA model is a very valuable tool for estimating "big picture" transportation requirements, analysis of the model output needs to be coupled with common sense as well as engineering judgment. While the diversion of 700 to 800 vehicles (off Monterey Highway to other facilities) per peak hour, per direction in 2035 is a realistic projection, given the proposed reduction of one lane per direction, the precise route choice of the diverted traffic is less clear. The travel forecast model reassigns the diverted traffic to roadways where capacity exists, insofar as the model's determination of residual traffic capacity, volume to capacity ratios, and resulting estimates of link speeds.

In Santa Clara County, motorists shift their time of day travel to utilize available roadway capacity, or to avoid congested roadway segments. Constructing a new roadway or widening an existing roadway typically attracts traffic from adjacent roadways, provided that the new route choice leads to shorter travel times. Conversely, a reduction in roadway capacity shifts travelers to adjacent roadways as traffic cascades across the network, seeking a balance between cost (of travel) and convenience. If the peak hour of travel demand is fully occupied, then travelers then shift their time of travel to shoulder hours as a function of time and space.

Combined Effect of Traffic Diverted From Monterey Highway onto Surrounding Roadways, HST Related Regional Traffic Reductions from Mode Shift, and Increased Traffic at San Jose Station

The VTA model does not reflect HST Project conditions insofar as the HST would lead to a mode shift of vehicle trips from the regional roadway network to HST. The traffic diverted as a result of the proposed highway narrowing can be compared to the trips removed from the roadway network by HST and new ingress/egress vehicular trips to the proposed San Jose HST Station to more fully assess the effects of the HST Project on the Monterey Highway study corridor.

The HST system would divert traffic from intercity roadways to the HST trains. The specific roadway segments which would be affected by this trip reduction cannot be determined by the model, but for purposes of this evaluation, it is assumed that these trip reductions would occur primarily on US 101 and to a somewhat lesser extent on the other major roadways in the study area. As presented in Table 3.1-2 of the 2008 Final Program EIR approximately 5,000 automobile trips would be diverted from US 101 between San Jose and Gilroy to the HST during the total 2030 morning and afternoon peak period under the Pacheco Pass Alternative. This would translate to a diversion of about 900 automobile trips per hour off of US 101 under the 2035 peak hour.

As stated above, new ingress/egress vehicular traffic to the proposed San Jose HST Station, would add traffic to the roadway network. Traffic is projected to increase on roadways surrounding the

Figure 3-2a



Figure 3-2b

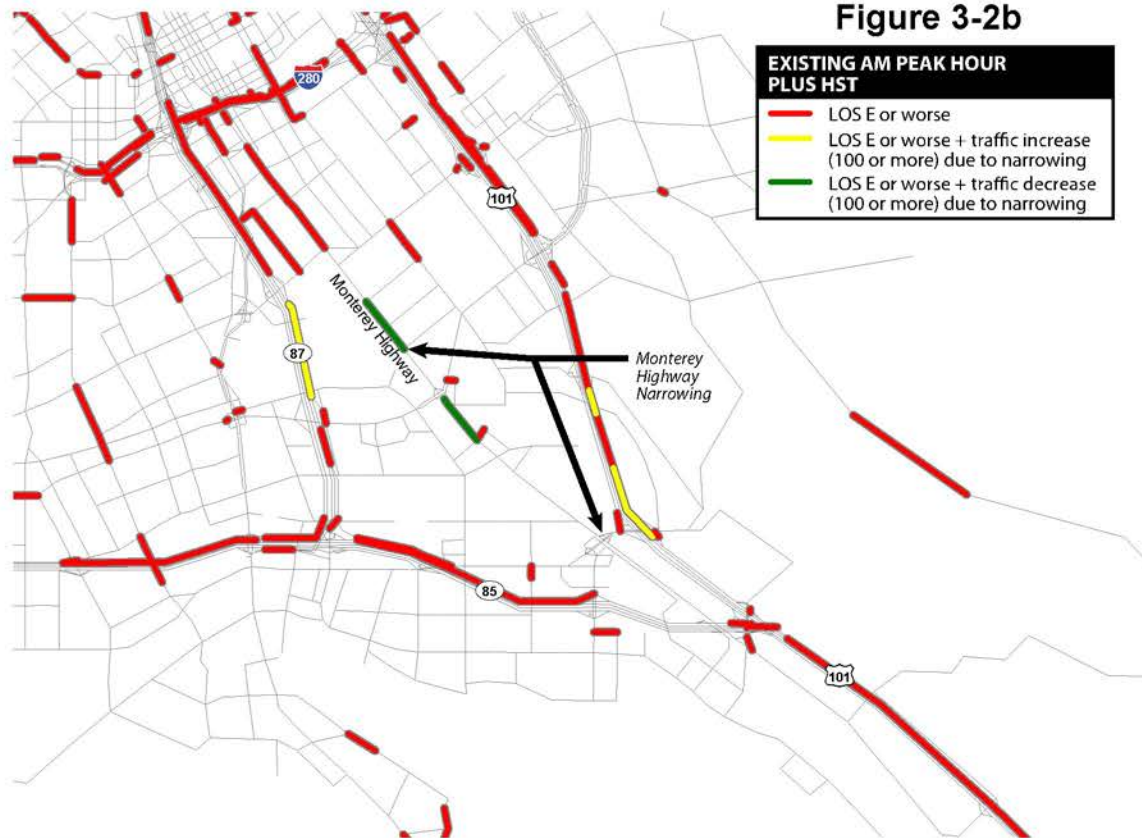


Figure 3-3a

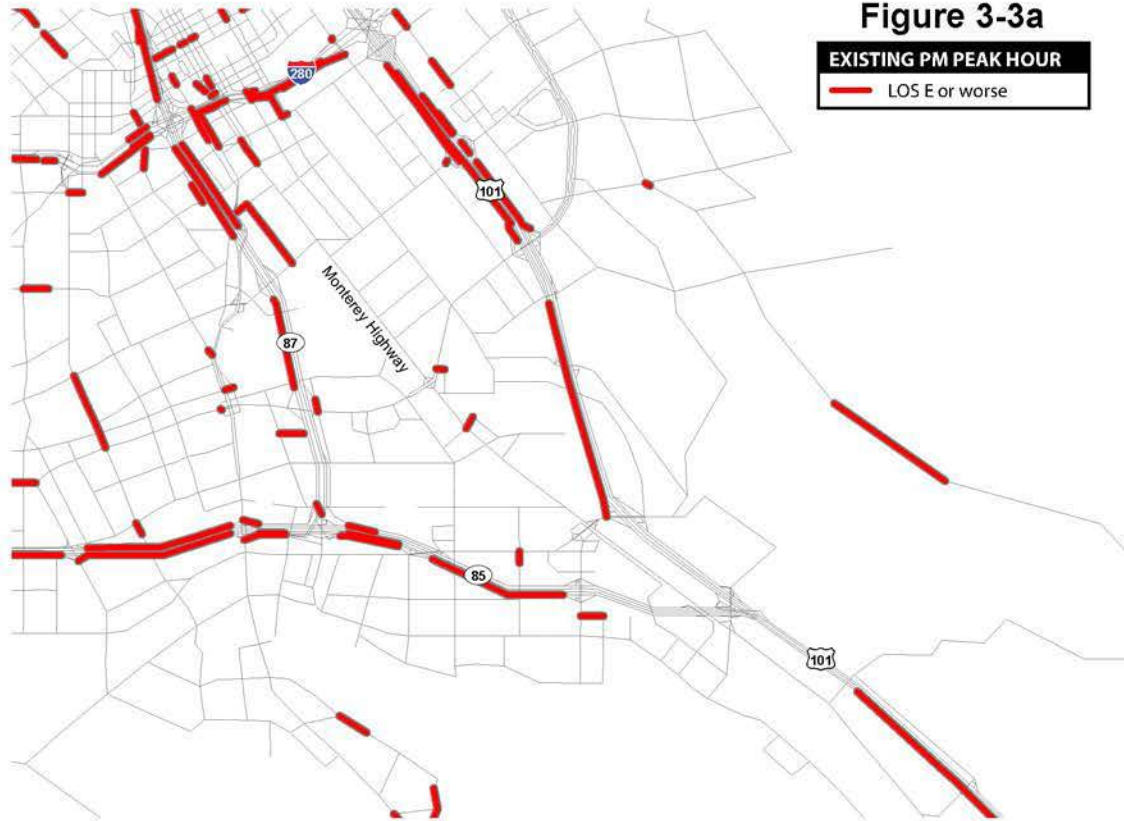


Figure 3-3b

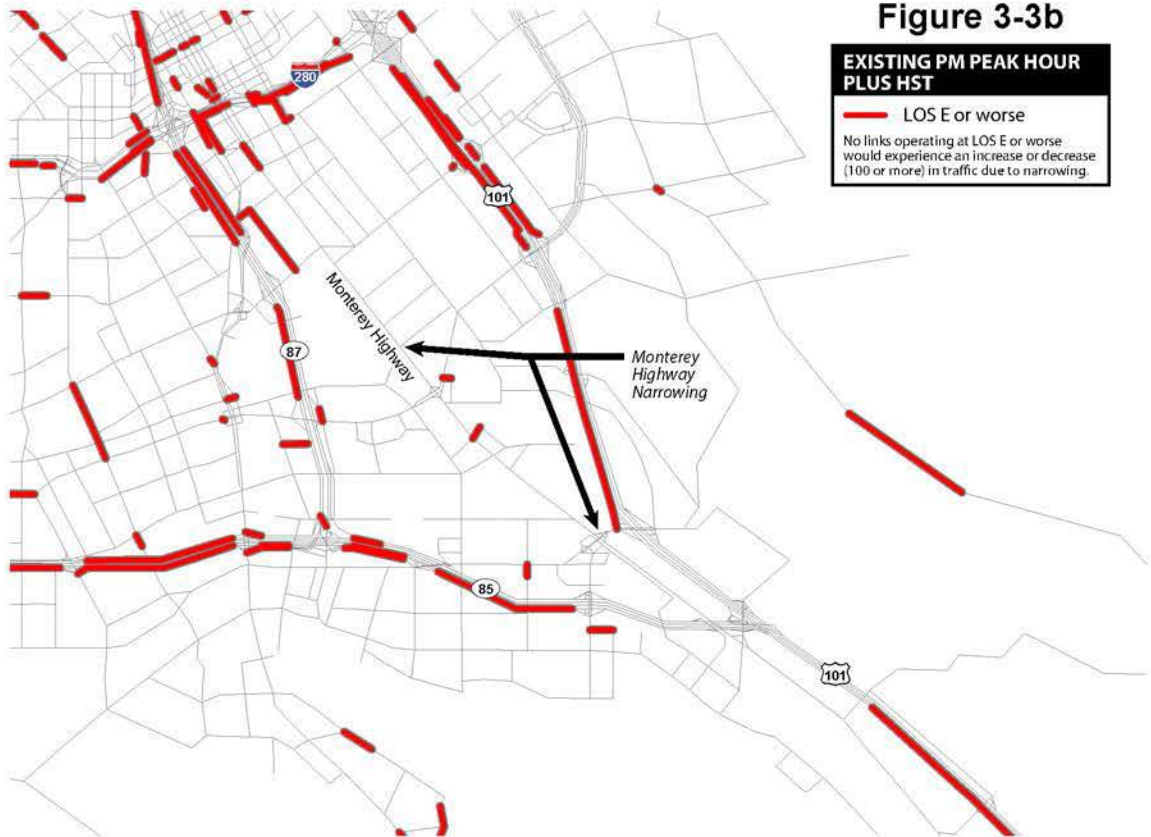


Figure 3-4a

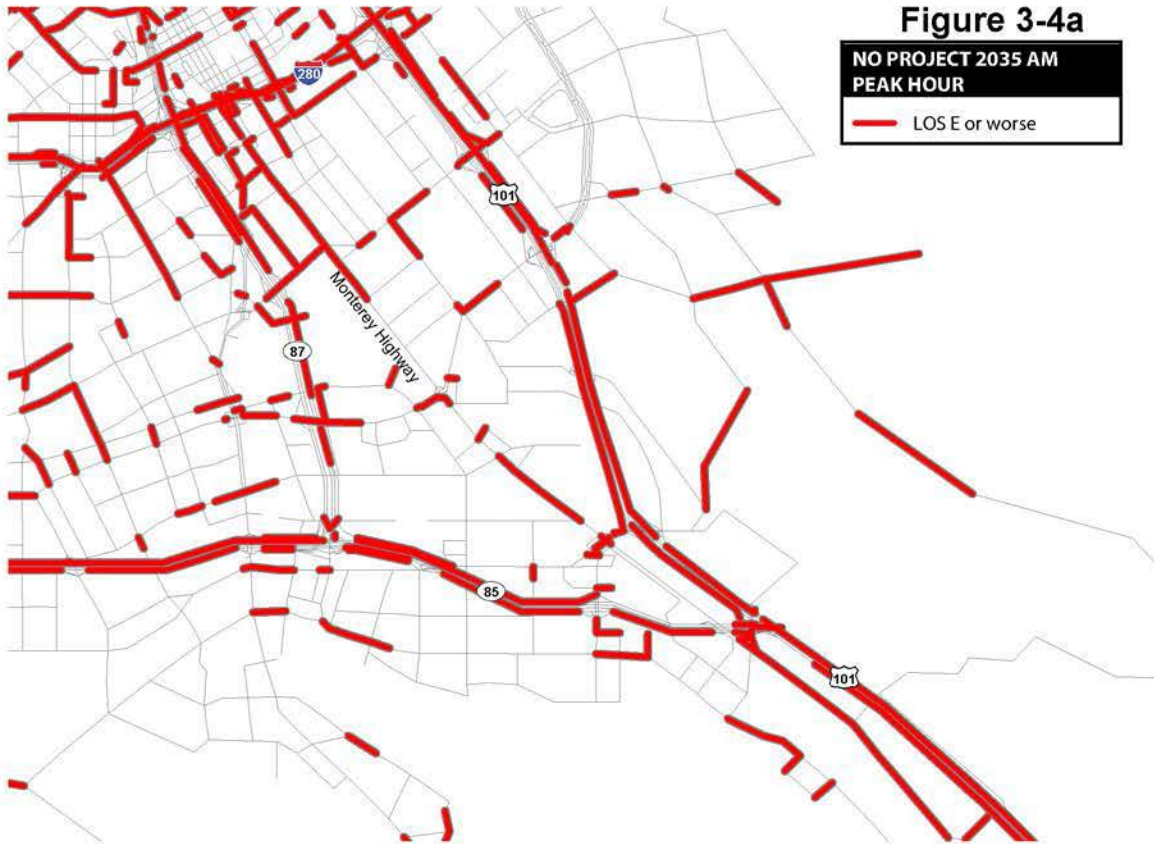


Figure 3-4b

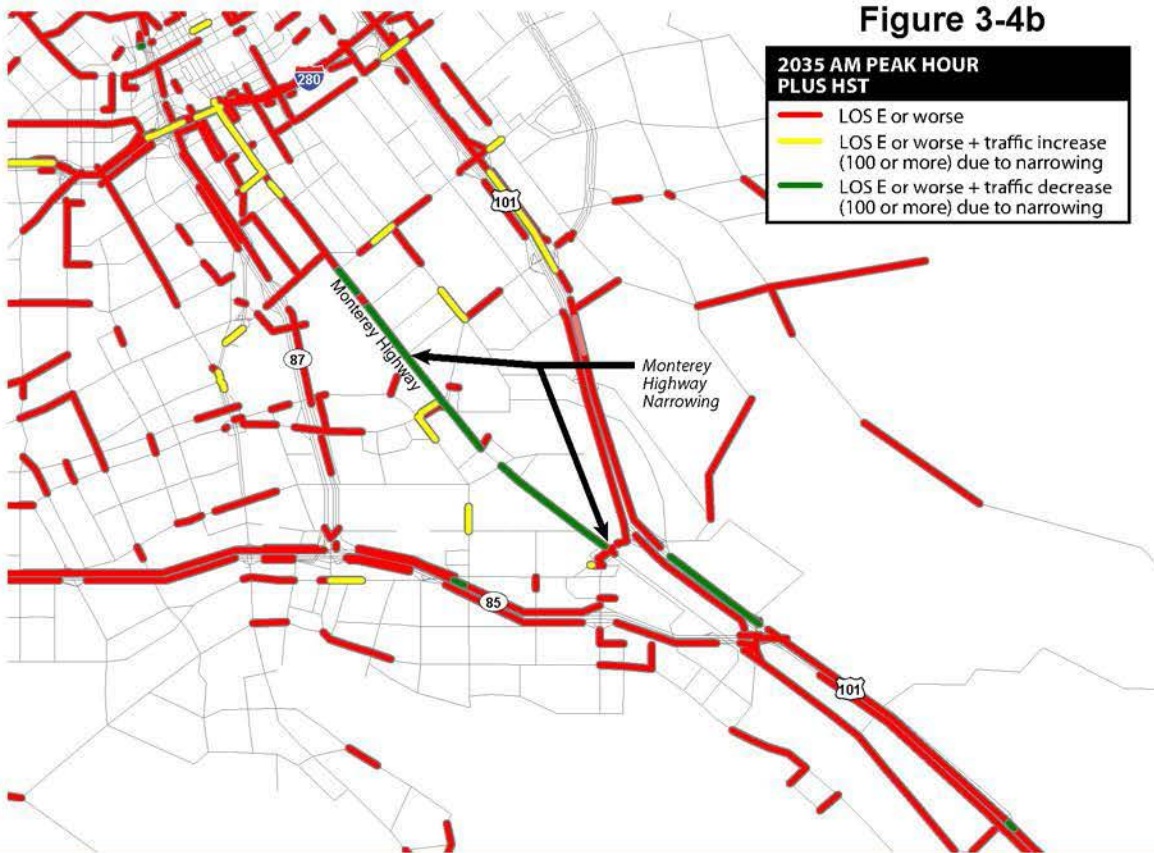


Figure 3-5a

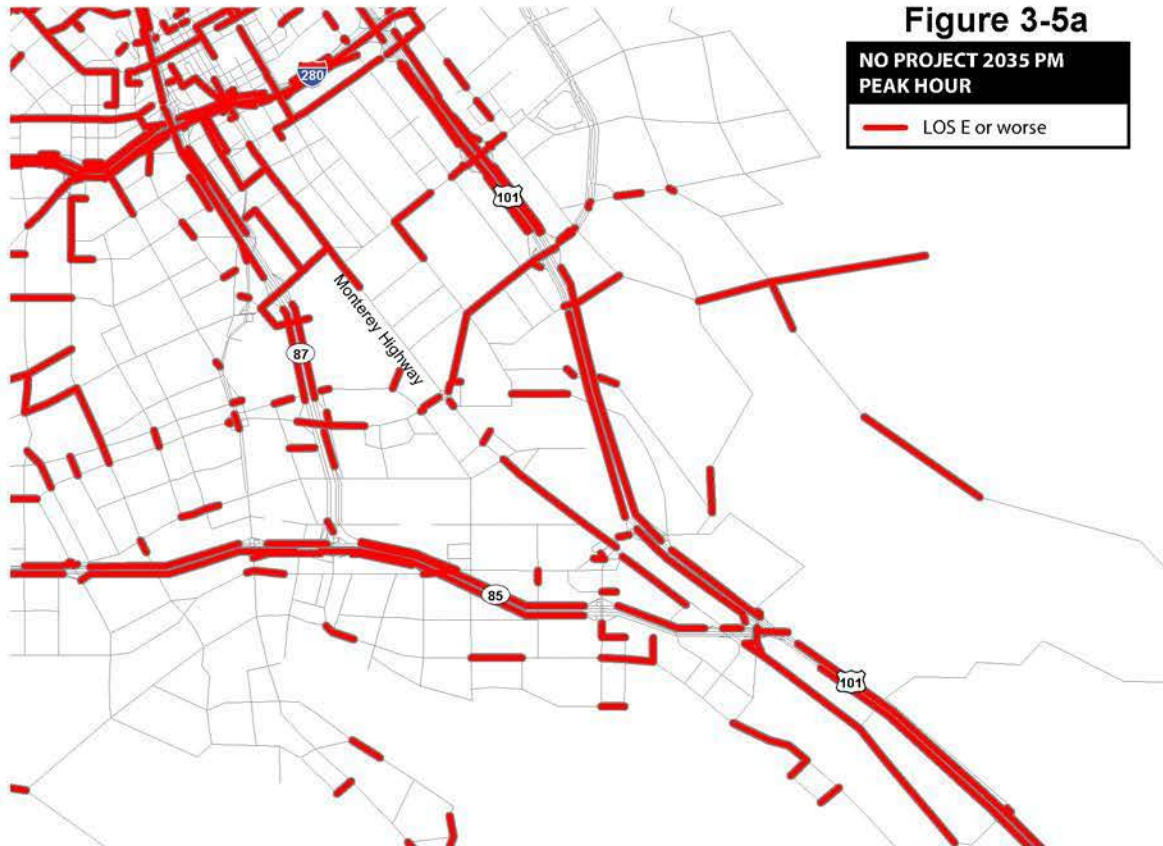
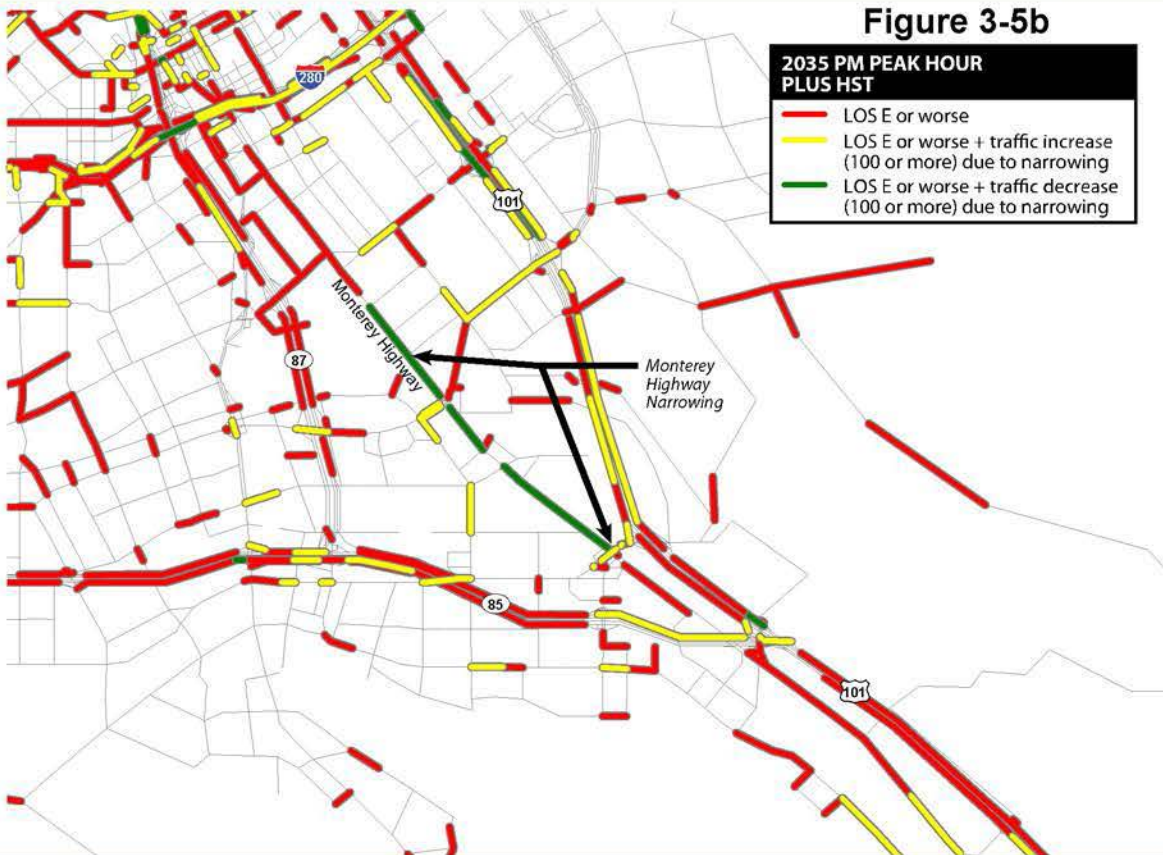


Figure 3-5b



proposed station and is projected to lead to an increase in the V/C ratio of the cordon surrounding the proposed San Jose station.

Viewing the combined effects of narrowing Monterey Highway, the mode shift from automobile to HST, and station area traffic increases at San Jose, there is some possibility that the mode shift to HST will offset local traffic congestion from narrowing Monterey Highway. While motorists would shift travel routes as a result of the proposed narrowing of a portion of Monterey Highway, an equal or greater number of motorists would be removed from south San Jose roadways altogether as a result of mode shifts from automobile to HST. By 2035, the Santa Clara County roadway network would be sufficiently congested such that any small decrease in roadway demand would be insignificant on a regional and subregional level. As demonstrated in the Bay Area, Santa Clara County and City of San Jose, travelers would shift their route choices, both in terms of the time and space, to optimize travel time and cost tradeoffs. Considering the uncertainty of the potential for the mode shift from automobile to HST to offset the impacts from narrowing Monterey Highway on the surrounding roadways, the narrowing is considered a significant traffic impact on the surrounding street network.

In summary, for purposes of this programmatic analysis and taking into consideration the mode shift from automobiles to HST where applicable, the narrowing of Monterey Highway is considered a new significant traffic impact both on the affected 3.3 mile segment of the Monterey Highway itself, and on the surrounding roadway network. Mitigation strategies are identified below.

C. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE UPRR RIGHT-OF-WAY ALONG THE EAST BAY IN HAYWARD

No Project Alternative

Smaller local projects involving improvements to local roadways, intersections, and bicycle and pedestrian routes are generally not included in the 2030 No Project Alternative as these items are not programmed many years in advance. Many of these local projects would occur over the project region and that much of it would be related to the traffic generated by nearby development (such as a new traffic signal for a development). It is assumed that no improvements would be made to the local streets in Hayward in the vicinity of the HST project's needs for additional right-of-way between East A Street and East Winton Avenue.

High-Speed Train Alternative

The HST on the Oakland to San Jose Corridor may impact a parallel roadway along the Nilas/I-880 alignment in the City of Hayward by requiring right-of-way from public streets to accommodate the HST project assuming that no portion of the UPRR right-of-way is available (see Section 3.2.2 of the 2010 Final Revised Program EIR). If existing roadway capacity is removed east of the UPRR tracks and south of the Hayward Amtrak Station along Meckland Avenue/Martin Luther King Drive between East A Street and north of East Winton Avenue (approximately 0.6 mile), it could result in localized impacts that include additional traffic congestion during peak travel times, loss of on-street parking used by adjacent residents, changes in circulation patterns, and street closures. For purposes of this programmatic analysis, the traffic impact at this location is considered a new significant impact for the Oakland to San Jose Corridor, even though the impact is limited to a certain area. However, if design refinement (at the project level) avoids these lane closures, impacts could be avoided and mitigation may not be required.

3.4 Role of Design Practices in Avoiding and Minimizing Effects (addition to Section 3.1.4 of 2008 Final Program EIR)

The design practices presented in the 2008 Final Program EIR, Section 3.1.4 remain accurate and unchanged. The reader is referred to that document for additional context. The following text is an addition to Section 3.1.4 of the 2008 Final Program EIR.

A. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE CALTRAIN RIGHT-OF-WAY ALONG THE SAN FRANCISCO PENINSULA

An approach to avoid and minimize effects of the potential loss of traffic lanes parallel to the Caltrain right-of-way along the San Francisco to San Jose Corridor could include modifying the HST alignment either horizontally and/or vertically. Design solutions that avoid these lane closures include but are not limited to the following:

- **Adjustment Vertical Alignments.** Where the rail alignment would overlap the road, the vertical alignment of the road or rail corridor could be adjusted to separate them:
 - The vertical alignment for the rail corridor could be raised on an aerial structure partially above the roadway such that the aerial structure would overhang the roadway. Columns supporting the aerial structure would be positioned to accommodate the roadway such that the roadway travel lanes would not be permanently impacted.
 - The vertical alignment for the rail corridor could be lowered in a trench with the road continuing to operate above the depressed rail corridor. The roadway would be partially supported by a cantilevered structure over the trench such that the roadway travel lanes would not be permanently impacted.
- **Lane Width Reductions.** Existing travel lanes could be narrowed to standard minimum widths to provide additional space to accommodate the rail corridor. The reduced travel lane widths would follow standards set forth by the jurisdiction in which the roadway is located.
- **Realignment of Roadway Segment.** The horizontal alignment of the roadway segment could be shifted such that it does not conflict with the rail right-of-way.
- **Reduction of On-Street Parking.** In cases where lane width reductions cannot accommodate the width required for the rail corridor and where a shift in the roadway is not possible due to potential impacts to private property (such as residences), the existing on-street parking could be reduced on one or both sides, as necessary, prioritizing maintaining parking for residences and commercial property.

3.5 Mitigation Strategies and CEQA Significant Effects (addition to Section 3.1.5 of 2008 Final Program EIR)

The mitigation strategies and CEQA significant effects presented in the 2008 Final Program EIR, Section 3.1.5 remain accurate and unchanged. The reader is referred to that document for additional context. The following text is an addition to Section 3.1.5 of the 2008 Final Program EIR.

A. POTENTIAL LOSS OF TRAFFIC LANES PARALLEL TO THE CALTRAIN RIGHT-OF-WAY ALONG THE SAN FRANCISCO PENINSULA AND IN HAYWARD ALONG THE UPRR RIGHT-OF-WAY

Strategies for lane closures related to additional right-of-way requirements:

- Determine the amount of diverted traffic onto parallel facilities and make improvements to those facilities to accommodate the diverted traffic.
- Realign the roadway to replace any loss of capacity.

- Change the affected roadway to one way to maintain access to properties along roadway and assess the diversion of the traffic eliminated onto parallel facilities, mitigating any new effects as required.
- Use physical barriers for protection to separate bicycle lanes from moving traffic.
- Restriping of parking spaces to fit with changed circulation patterns and/or to maintain number of spaces.
- Calculate project-related level of impact at intersections and roadways that are affected by these lane closures in combination with other cumulative projects and growth. Work with local jurisdictions and congestion management agencies to determine "fair share contribution" to fund reasonable share of necessary improvements.

The above mitigation strategies would be refined and applied at the project level and are expected to substantially avoid or lessen impacts to a less-than-significant level in most circumstances where lane closures are required due to the need for additional right-of-way along the San Francisco to San Jose Corridor and in the East Bay in the City of Hayward. At the project level, it is expected that lane closure impacts would be mitigated to a less-than-significant level, but it is possible that at some locations impacts would not be mitigated to the less-than-significant level. Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce impacts to a less-than-significant level in all circumstances. This document therefore concludes that traffic impacts associated with lane closures may be significant, even with the application of mitigation strategies. Additional environmental assessment will allow a more precise evaluation in the second-tier, project-level environmental analyses. The co-lead agencies will work closely with local government agencies at the project level to implement mitigation strategies.

B. POTENTIAL NARROWING OF TRAFFIC LANES ON MONTEREY HIGHWAY AND IMPACTS ON SURROUNDING STREETS

The degradation of LOS projected for segments of Monterey Highway as discussed above 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 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, if feasible based on project-based design. (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.

Mitigation strategies for traffic impacts on neighboring streets due to the narrowing of Monterey Highway, if necessary, would also include signal timing optimization, signal synchronization and selectively adding new turn lanes at intersections.

Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce impacts on Monterey Highway or to neighboring streets due to narrowing of Monterey Highway to a less-than-significant level in all circumstances. This document therefore concludes that traffic impacts may be significant, even with the application of mitigation strategies.

3.6 Subsequent Analysis (addition to Section 3.1.6 of 2008 Final Program EIR)

The subsequent analysis presented in the 2008 Final Program EIR, Section 3.1.6 remains accurate and unchanged. The reader is referred to that document for additional context. The following text is an addition to Section 3.1.6 of the 2008 Final Program EIR.

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:

- Changes in traffic volumes on regional roadways that result from HST construction and operations;
- 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;
- The number of parking spaces required and the placement of the parking facilities. 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;
- 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;
- 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; and
- 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.

4 CONSTRUCTION

This chapter revises Section 3.18 from the 2008 Final Program EIR. This chapter is in addition to the treatment of construction impacts contained in various resource area sections in Chapter 3 of the 2008 Final Program EIR. Readers are referred to those chapters for more information about construction impacts by resource area. Changes to text from the Partially 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.

3.18 Construction Methods and Impacts

This section describes the construction methods and related types of impacts considered for the No Project and HST Alignment Alternatives[‡]. Construction methods are the basis for assessing and qualifying the potential environmental impact from construction activities. These construction methods would be used to prepare, construct, and implement the typical highway, airport, and HST alignment improvements that make up the alternatives, including adjustments to Monterey Highway and other rail and transportation facilities that may be affected.

3.18.1 Construction Method Approach

This section identifies the types of construction (highway and rail alignment) associated with the alternatives, describes the typical sequence and methods for each type of construction, and discusses potential construction-related impacts. The construction of highway improvements is a common element of both the No Project and the HST Alignment Alternatives. Improvements that make up the alternatives are grouped by type of construction and their relationship to the system alternatives, as indicated in Table 3.18-1.

**Table 3.18-1
System Alternative Construction Types**

Improvement Type	System Alternative	
	No Project	HST Alignment
Expanded Highway	X	X
Monterey Highway Lane Reduction and Shift		X
HST Alignment		X
HST Station/Facility		X

X = Common construction type.

3.18.2 Planned Highway Improvements and Monterey Highway and other Roadway Adjustments

Improvements to existing highways that are planned and programmed are included in the No Project and HST Alignment Alternatives. The improvements to existing highways include:

- Safety improvements.
- Straightening the alignment.
- Interchange improvements.

[‡]See Section 3.0, Introduction, for an explanation of how this section fits together with the HST Network Alternatives presented in Chapter 7, as well as for an overview of the information presented in the other chapters.

- Access and terminal/station road improvements.
- Limiting access.
- Adding ramp meters.
- Adding a truck climbing lane.
- Adding new auxiliary lanes.
- Adding new HOV lanes.
- Adding new general use lanes.
- The construction along Monterey Highway to implement the high-speed train would involve both reducing the number of lanes from six to four generally within the existing highway right-of-way for approximately 3.3 miles, and shifting the highway to the east between 0 and 60 feet in some locations (see Figure 2-2).

3.18.3 Highway Improvement Process and Monterey Highway and other Roadway Adjustments

A. CONSTRUCTION WORKSITE CHARACTERISTICS

The worksite for a highway capacity improvement project is the existing highway right-of-way and additional right-of-way (including any temporary construction easements) that has been acquired for the project. The defining characteristic of this worksite is the need to maintain traffic on the existing highway during construction of the improvement.

During construction, traffic is first shifted to one side of the existing roadway while the opposite side is improved (e.g., new retaining walls and pavement installed to widen the roadway, barriers installed or replaced), then traffic is shifted back onto the newly improved portion while the other side is improved. Operational issues associated with construction are complicated and require significant coordination with the contractors and responsible agencies.

The worksite for Monterey Highway construction would be the existing highway right-of-way, the new right-of-way in areas where the highway would shift, and temporary construction easements to provide staging areas for equipment and materials. The defining characteristic of the Monterey Highway construction worksite is the need to maintain traffic flow during construction. To maintain traffic flow during construction, traffic would be first shifted to one side of the existing roadway while the opposite side is improved (e.g., new retaining walls, sidewalks, landscaping and pavement installed to widen the roadway, barriers installed or replaced), then shifted onto the newly improved portion while the other side is improved. During times of low traffic volumes, additional lanes would be coned off to provide temporary additional work space.

B. TYPICAL CONSTRUCTION SEQUENCE (CONSTRUCTION METHOD)

The typical construction sequence would be:

- Mobilization and site preparation—Clear any remaining buildings or other improvements from any new right-of-way.
- Initial traffic control phase—Implement a plan for the temporary protection and direction of traffic. The initial traffic control plan phase may include construction of new sound walls along the new edge of the right-of-way.
- Repeat for each traffic control phase—Remove the portions of existing structures; construct the portions of new structures and bridges, existing structure widening, and existing embankment

widening or excavations; and widen pavement and install temporary pavement markings. Repeat for the next phase of the traffic control plan.

- Final traffic control plan phase—Construct new wearing surface across entire width of each direction of roadway and install final pavement markings.
- Finishes—Construct elements such as signage and landscaping (this phase may start prior to the final traffic control phase).

Mobilization and Site Preparation

The key mobilization activity would be to develop a traffic control plan for the temporary protection and direction of traffic. If the capacity improvement project is expanding the highway right-of-way, site preparation would include clearing the new right-of-way of conflicting structures, obstructions, and utilities. This would also be the case for shifting Monterey Highway. If the highway project does not include new right-of-way, little site preparation work can be started until a plan for the traffic plan is implemented. This would be the case for narrowing Monterey Highway from six lanes to four lanes between Southside Drive and south of Blossom Hill Road.

Minor capacity improvement projects generally do not require sufficient excavation or embankment to justify developing new material sources or waste sites. Major highway widening may justify opening (or more likely re-opening) a quarry or other aggregate source and setting up a rock crusher. A project that includes replacing the existing structures or pavement may well include an aggregate (pavement) crushing plant to recycle used pavement into new aggregate. The crushing plant would not be mobilized until sufficient material has been removed to allow several months of continuous operation. (If the project does not require recycling, the contractor would dispose of the waste material, either as embankment material or at a disposal site.)

Initial Traffic Control Phase

Each traffic control phase would shift traffic away from that phase's work zone and would install temporary barriers to protect workers in the work zone from traffic. The shift can use some combination of closed lanes, narrowed lanes, and the pavement shoulder for through traffic.

Earthwork

The contractor would construct the required retaining walls, embankments, and excavations. The design would attempt to balance cut and fill requirements, but severe terrain or urban conditions may require imported fill or exported cut material. If the overall schedule permits, the embankments would be allowed to consolidate for a year or two before pavement is placed on them. The contractor would route any existing drainage that crosses the alignment through new and extended pipes or box culverts. The contractor would install inlets and pipes, detention basins, and outfalls for roadway drainage.

Structures

The contractor would construct grade separation, drainage, and other bridges or concrete boxes as required.

Pavement

The contractor would finish grading the new roadbed, install subbase, base rock, and bridge approach slabs, and may pave the new roadway. The new pavement would drain to the inlets previously constructed. The contractor would construct any transition sections required. The contractor would install pavement markings on the completed roadway.

Repeat For Each Traffic Control Phase

Subsequent traffic control phases would shift traffic onto the completed portion of the work to create a new work zone. The contractor would construct/reconstruct the portion of the pavement and structures in the new work zone, then shift the traffic to a new traffic control phase until all new pavement and structures are complete.

Final Traffic Control Plan Phase

For some roadway widening, when the temporary barrier is removed, the contractor would overlay a new pavement wearing surface across the entire roadway width. This paving could be done at night, when traffic volumes are reduced, and may take several nights. The contractor would install temporary pavement markings as the new top lift is installed. The contractor would install permanent markings after the new wearing course has aged for a week.

Finishes

Construction of the new pavement wearing course and markings may complete the project, or construction may continue with shoulder barriers, signage, and landscaping.

C. TYPICAL CONSTRUCTION IMPACTS

The general types of construction impacts associated with highway capacity improvement projects, Monterey Highway construction, or other locations where lane narrowing or adjustments are made include the following, which are considered significant under CEQA at the program level.

- **Construction Period Traffic Congestion:** Traffic control plan lane closures and lane narrowing to allow for demolition, construction, and paving would occur mainly at night, when traffic volumes are less, but could still potentially result in increased traffic congestion ~~both~~ on roadways, including Monterey Highway as well as on surrounding local streets during the construction period.
- **Construction Period Air Emissions:** Construction of highway capacity improvement projects, including Monterey Highway construction, would generate short-term air pollutant emissions (fugitive dust emissions, mobile source emissions, potentially asbestos) from demolition of existing structures and roadways, excavation, facilities construction, mobile source emissions from construction worker travel to and from the project site, mobile source emissions from delivery and hauling of construction supplies and debris to/from the work site, and emissions from heavy construction equipment.
- **Construction Period Noise and Vibration:** Construction of highway capacity improvement projects, including Monterey Highway construction, would generate noise and vibration impacts from heavy construction equipment, including jackhammers and pavement breakers, as discussed generally in Chapter 3.4 of the 2008 Final Program EIR.
- **Construction Period Energy:** Construction of highway capacity improvement projects, including Monterey Highway construction, would result in a one-time, non-recoverable energy cost which would occur during the construction period.
- **Construction Period Runoff and Erosion:** Construction of highway capacity improvement projects, including Monterey Highway construction, has the potential to disrupt the existing roadway drainage system, potentially leading to runoff and erosion unless mitigation measures and/or design practices are imposed as a control measure.
- **Construction Period Aesthetics and Land Use Effects:** Construction of highway capacity improvement projects, including Monterey Highway construction, would result in staging areas

with construction equipment, signage, barriers, and potential nighttime lighting that may be visible from adjacent properties. Construction may be disruptive to adjacent land uses.

- **Construction Period Hazards and Waste:** Hazardous materials/wastes may be present in the project area and could be encountered during project construction, and construction activities may result in the release of small quantities of fuel through accidental release or upset.
- **Construction Period Cultural Resources:** Construction of highway capacity improvement projects, including Monterey Highway construction, could result in the discovery of previously unknown archaeological, paleontological, or historic resources.
- **Construction Period Biological Resources:** Depending on construction techniques, construction of highway capacity improvement projects, including Monterey Highway construction, could result in impacts on sensitive vegetation communities, special-status plants and wildlife, and water resources/wetlands. Additionally, sediment disturbance from construction could affect some fish species.
- **Construction Period Section 4(f) and 6(f) Resources:** Construction of highway capacity improvement projects, including Monterey Highway construction, could affect the use of publically owned parks and recreational uses.

In addition Highway capacity improvement projects, including Monterey Highway construction would generate waste pavement that would either be recycled, or if the material was unsuitable, placed in landfills. This impact is considered less than significant at the program level.

3.18.4 High-Speed Train Alignment Alternatives

This section applies to the HST Alignment Alternatives and the new construction associated with track alignment and system elements. The alignment would include at-grade, aerial, bridge, and tunnel components.

A. CONSTRUCTION WORKSITE CHARACTERISTICS

In most locations, particularly in urban areas, the worksite (new HST alignment) would be close to existing railroad tracks, within active rail corridors, or close to highway facilities. However, in some locations, the worksite would follow a new alignment independent of existing railroad or highway infrastructure through undeveloped areas. In areas where there is existing Caltrain and freight (UPRR) rail service, the worksite would need to maintain service during construction of the HST alignment and facilities. The construction worksite within active rail corridors may require temporary construction easements in some locations to create temporary "shoofly" tracks next to the existing tracks to provide continued service during HST construction. New grade crossings, temporary Caltrain station platforms, and associated signal system upgrades would be constructed as a requirement of the shoofly tracks. Additionally, access to freight rail sidings and leads would need to be maintained throughout the phased construction process. Caltrain and freight operations would shift onto the new shoofly tracks once they were complete. Close coordination between the Authority, Caltrain and the freight operator would be critical throughout the process.

The new trackway and worksite would have three primary characteristics in high-speed segments—long tangent sections connected by very large-radius horizontal curves, long sections of constant grade connected by long vertical curves, and underpasses or overpasses wherever the trackway crosses another surface transportation alignment (e.g., street, highway, railroad track). In urban areas, the curve radii are generally reduced because of development constraints, but the curves generally are still greater than the existing highway alignments.

In some locations, such as the Central Valley, the topography simplifies construction of an HST trackway. The major construction effort would be to clear obstructions from an appropriately straight

alignment and to construct grade separation structures to carry crossing roads and other railroads over or under that alignment.

In other locations, especially where the HST system crosses mountain ranges, the topography would challenge the construction of an HST trackway. In challenging terrain, the major construction effort would consist of reshaping the earth (earthwork or cut and fill) and constructing bridges and tunnels to cross over or under the existing ground surface where it is impractical to achieve the alignment geometry through reshaping.

There would be additional infrequent, but important, worksites along the alignment. These additional worksites include:

- Traction power substations and signal/communications bungalows.
- Tunnel ancillary structures (e.g., tunnel emergency egress/access points, tunnel ventilation buildings, tunnel drainage pumping plants).

In addition, there would be temporary (construction-related) sites, such as:

- Access roads and yards.
- Embankment material and aggregate source sites.
- Tunnel spoil and other excavation material disposal sites.
- Rail welding, aggregate crushing, Portland cement concrete, and asphaltic concrete plant sites.
- Shoofly tracks and station platforms, as necessary, to maintain existing rail operations.

B. TYPICAL CONSTRUCTION SEQUENCE (CONSTRUCTION METHOD)

The typical construction sequence would be:

- Mobilization and site preparation—Clear the alignment of conflicting improvements, including buildings and utilities not already removed, and mobilize for construction, including establishing construction yards, building site access roads if necessary, developing aggregate sources and embankment material borrow pits, and preparing excavation material and tunnel spoil waste sites. Mobilizing for construction within an active rail corridor would include building temporary shoofly tracks, grade crossings, Caltrain station platforms, signal system upgrades, and access to freight sidings and leads.
- Heavy civil construction—Construct the trackbed, including embankments, cuts, bridges, or tunnels; construct crossing highway or railroad grade separation structures if not already in place; and construct supporting facilities, including central control building, vehicle maintenance buildings and storage yards, and passenger stations. Within an active rail corridor, HST construction as noted above would continue on one side of the right-of-way while passenger and freight rail operations continue on the other. Once completed, Caltrain and freight service would be shifted from the shoofly tracks onto the new, permanent tracks. To complete a four-track system within an active rail corridor, additional tracks would be constructed along with the associated grade separations, permanent station platforms and signal system generally within the existing right-of-way. The last step would be to shift all HST, Caltrain and freight service to the new four-track alignment and to relinquish the temporary construction easement.
- Railroad systems construction—Construct trackwork and special trackwork, traction electrification, and railroad signaling and communications on the trackbed and at the supporting facilities.
- Finishes—Construct elements such as signage and landscaping (this phase would overlap with railroad systems installation and system testing).

- System testing—equipment and system testing would culminate with a period of simulated full revenue service.

Mobilization and Site Preparation

Construction of the HST system would require a large workforce, a large fleet of construction equipment, large quantities of aggregate and embankment materials, and a large number of manufactured products. This initial phase would develop the construction yards and other temporary infrastructure required to assemble and organize these construction resources. The Authority's right-of-way acquisition program may have cleared the right-of-way of existing improvements (primarily buildings and utilities). If those improvements have not already been removed, the contractor would remove them during this phase.

During the construction mobilization phase, the contractor would set up construction yards to receive equipment and products, prepare sources (i.e. quarries and borrow pits) for aggregate and embankment materials, and cut pioneer roads as necessary to reach remote work sites (e.g., tunnel portals and shafts, bridge piers). The contractor would also remove or relocate any conflicting improvements (buildings, utilities, roads, track) that remain on the right-of-way.

Heavy Civil Construction

Construction of the high speed rail system would reshape a strip of land 40 to 100 ft wide to create a trackbed meeting the system's horizontal and vertical alignment requirements. (The width of the strip of land would be greater at special locations such as passenger stations or vehicle maintenance facilities.) The trackbed would be grade separated—meaning that other facilities, such as existing or future roads, tracks, or cattle paths, would cross the alignment above or below the high speed rail tracks. Where the terrain is too severe, or the crossing roadways and other tracks too numerous, bridges or tunnels would carry the trackbed over or under the terrain.

Reshape the earth means that the contractor would remove the existing vegetation and topsoil, excavate farther down (below the topsoil), or bring in embankment material and construct engineered fill as necessary to reach the design subgrade elevation, and cap the subgrade with compacted crushed aggregate subballast. The contractor would construct drainage ditches or subdrains on either side of the alignment. The contractor would also construct discharges from the ditches and subdrains at appropriate points.

In any of these grade separation cases, the contractor would build grade separation structures and roadwork or trackwork on or through the structures during the heavy civil construction phase. If the structure carries the high speed rail alignment over the crossing road or track, the structure would be constructed prior to the trackbed. If the structure carries the crossing road or track over the high speed rail alignment, the structure could be constructed either before or after the trackbed. Grade separation construction would sometimes include the modification of existing or construction of new traffic signal systems.

To construct a grade separation bridge, the contractor would remove the existing vegetation and topsoil under the future structure, construct foundations under piers and bridge abutments, construct piers and abutments, construct the bridge superstructure (girders and deck), and install finish elements such as approach slabs, metal railings, or solid concrete parapets. The foundations and superstructure types for any bridge would be selected in the design phase based on site-specific conditions from menus of likely foundations and superstructures. The foundation menu includes:

- Spread footings.
- Driven or drilled piling covered with a pile cap.

- Cast-in-drilled-hole (CIDH) piers.

The superstructure menu includes:

- Steel or precast concrete girders supporting a deck slab.
- A cast-in-place or precast concrete box with a deck slab integrated into the main girder.

Precast concrete girders would also be prestressed; cast-in-place concrete boxes may be prestressed or reinforced without prestress.

To construct a grade separation cut-and-cover concrete box, the contractor would excavate to a depth below the future box, then construct the box bottom slab, walls, and roof; backfill the sides and over the top of the completed box; and install finish elements such as lighting.

Construction of any of these structures would require heavy equipment access to the site and maneuvering room for the equipment. In addition, the cast-in-place concrete box option would require falsework to support the formwork that shapes the structure.

Bridges over severe terrain could be similar to grade separation bridges; however, because of the difficulty in locating intermediate piers, severe terrain bridges could require more elaborate long span or precast segmental superstructures. While special superstructures could reduce the access requirements for intermediate piers, they would still require access to both abutments and possible larger abutment work areas to prepare girders to be launched across the ravine being bridged.

Tunnels through severe terrain must be excavated from headings. If the tunnel is short (up to 6 miles long), it might be reasonable to construct it from a single heading. The selected HST system has no tunnels longer than 6 miles.

At each tunnel heading access site, there must be sufficient work area to accommodate:

- Worker and equipment staging.
- Tunnel utility infrastructure (fresh air supply, compressed air, water, electric power, and tunnel drainage).
- Tunnel spoil surge piles.
- Storage of excavation support materials (e.g., steel ribs, rock bolts and shotcrete, precast liner panels).

There must be room to transfer materials going into the tunnel from trucks to tunnel railcars, and to transfer spoil coming out of the tunnel from tunnel railcars or conveyor belts to trucks. These heading access site requirements are generally independent of the excavation method (tunnel boring machine, drill and blast, or road-header) or number of tunnel bores (two single-track tunnels or one double-track tunnel).

After the tunnel is excavated, many of the tunnel construction access sites would become permanent tunnel support sites, such as ventilation plants, pump stations, traction power substations, and emergency access points.

To avoid or limit potential impacts along the surface above the tunnels, the selected HST system has limited surface access for ventilation and/or evacuation through tunnel design. The potential impacts associated with construction access roads would be greatly limited, and avoided altogether in some sensitive segments (as defined at the project level), by using in-line construction, i.e., by using the new rail infrastructure as it is built to transport equipment to and from the construction site and to

transport excavated materials away from the construction area and to appropriate re-use or disposal sites. To avoid the creation of access roads in sensitive areas (as defined at the project level), it may be necessary to conduct geologic exploration using helicopter transport for drilling equipment and restoring sites after use, which would result in minimal surface disruption. Small pilot tunnels would be used where more extensive subsurface geology information is needed.

The heavy civil construction phase may also include construction of alignment elements to support the subsequent railroad systems phase:

- Cable trough or duct banks.
- Foundations for poles supporting the overhead contact system.
- Site work for traction power substations.

Railroad Systems Construction

The railroad systems include trackwork, traction electrification, signaling, and communications. (The rail vehicles are another key system but are not discussed in this section.)

Trackwork includes both the typical track structure and special trackwork. Special trackwork is the track switches, frogs, crossing diamonds, etc., that make up turnouts and crossovers. Trackwork is the first rail system to be constructed, and it must be in place at least locally to start traction electrification and railroad signaling installation. Trackwork construction generally requires the welding of transportable lengths of steel running rail (traditionally 78 ft in length) onto longer lengths (approximately ¼ mile), which are placed in position on crossties or track slabs and field-welded into continuous lengths from special trackwork to special trackwork. Trackwork would also be required for reconstruction of passenger and freight rail operations within an active rail corridor.

Tie and ballast track construction typically requires that crossties and ballasts be distributed along the trackbed by truck or tractor. In sensitive areas, this operation can be accomplished by using the established right-of-way corridor with delivery of the material via the constructed rail line because in-line construction techniques are proposed. The top 4 inches or so of ballast can be delivered by railcar over the assembled track.

The traction electrification equipment to be installed includes traction power substations and the overhead contact system. The running rails, which serve as the power return current conductor, are also part of the electrical circuit. Traction power substations are typically fabricated and tested in a factory, then delivered by tractor-trailer to a prepared site adjacent to the alignment. Substation spacing depends on the power supply technology selected, but this document assumes one substation every 30 miles per the Engineering Criteria Report, January 2004.

The overhead contact system is assembled in place over each track from components (poles, brackets, insulators, conductors, and various hardware). The overhead contact system is connected by field-wiring to adjacent substations.

The signaling equipment to be installed includes wayside cabinets and bungalows (within established rights of way), wayside signals (at interlockings), switch machines, insulated joints, impedance bonds, and connecting cabling. The equipment supports several technologies—Automatic Train Protection, Automatic Train Control, and Positive Train Control—to control train separation, train routing at interlockings, and train speed.

The communications equipment to be installed includes System Control and Data Acquisition (SCADA), telephone, radio, closed-circuit television, and visual messaging. The equipment is located

in the system central control facility, wayside communications bungalows, passenger stations, tunnel equipment rooms, traction power substations, signal bungalows, and other locations. Communications data likely would be carried on a fiber optic backbone running the length of the alignment.

Finishes

Landscaping, signage, architectural finishes, and similar items involve construction trades different from those required for heavy civil or railroad systems. The distinction between finishes and earlier phases of work is important for labor and material scheduling but not for the identification of work sites or overall construction methods. Finishes would be installed at the same construction worksites as the earlier phases of construction and would probably overlap the completion of the heavy civil and railroad systems work.

Testing and Start-Up

All work would be inspected and tested as stand-alone items as part of its construction. During system testing and start up, the work would be checked again to confirm that it functions as an integrated system. For example, integrated testing would confirm that the SCADA tunnel ventilation system status display at central control truly reflects the status of the ventilation systems, and that the ventilation equipment correctly responds to commands initiated at central control.

C. TYPICAL CONSTRUCTION IMPACTS

Overall, the HST Alignment Alternative construction sites would have numerous site-specific impacts on adjacent land uses and within active rail corridors. However, some construction impacts would be more universal in nature. Typical impacts may include the following, which are considered significant under CEQA at the program level.

- The worksite would generate traffic on public roads leading to the site and on private haul routes running along the alignment or between the alignment and construction yards. The traffic would include construction worker commuting, delivering construction supplies (e.g., bulk cement, asphalt, steel, fuel, manufactured products), and moving construction materials (primarily dirt from excavations to embankments, and aggregate). In sensitive areas, these operations can be accomplished using the established right-of-way corridor with delivery of the material via the constructed rail line because in-line construction techniques are proposed.
- The worksite would be cleared of ground cover for construction. As a result, rainstorms would produce greater runoff and erosion than would otherwise be the case. The high speed rail construction contractor would use silt fences, hay bales, and other measures to control runoff and erosion.
- The construction project has the potential to generate large quantities of material—from pavement demolition, clearing and grubbing, and soil/rock—that is anticipated to be suitable for reuse in the construction of the proposed HST facilities. Potential uses include aggregate for concrete and fill material for other portions of the line. The project itself would generate a much smaller volume of waste—product packaging, broken equipment, and site litter. The project may experience minor hydraulic fluid, motor oil, and fuel spills that would result in the disposal of contaminated soil. The project may generate a comparatively tiny volume of hazardous waste from building demolition. The high speed rail construction contractor would collect and dispose of solid waste appropriately.
- Some heavy civil construction activities, notably pile driving and rock excavation with explosives, would be inherently noisy. Most construction activities would use large pieces of construction equipment, and the equipment would generate noise. Most of the construction worksite would be sufficiently remote so that construction noise would not cause adverse impacts on adjacent

land uses. However, the portions of the worksite in urban areas may experience sufficient construction noise to have an impact on adjacent properties.

- Tunnel excavation would likely take place 24 hours per day. As a result, tunnel heading access sites would also be occupied 24 hours per day and would be illuminated at night. The nighttime illumination may have an impact on adjacent land uses.
- Roadway grade separations would connect to active roads at both ends of the grade separation worksite. Particularly in urban areas where the surrounding areas are not sensitive to noise impacts, roadway traffic may be such that the connection work must be performed overnight, when traffic volumes are less. The night connection work, if required, would be illuminated, and the illumination may have an impact on adjacent land uses.
- The following construction activities would generate short-term pollutant noise increases and air emissions (fugitive dust emissions, mobile source emissions, and asbestos):
 - Demolition of existing structures.
 - Excavation related to preparation of track beds and installation of rail.
 - Welding related to CWR operations.
 - Mobile emissions related to construction worker travel to and from project sites.
 - Mobile emissions related to the delivery and hauling of construction supplies and debris to and from project sites.
 - Stationary emissions related to fuel consumption by onsite construction equipment.
- Temporary construction easements may be required to construct temporary shoofly tracks next to existing tracks, new grade crossings, or temporary station platforms. These temporary construction easements may result in a need for additional real property on a temporary basis, and may involve temporary traffic, noise and vibration, and aesthetic/land use impacts.

3.18.5 High-Speed Train Stations/Facilities

This section applies to the HST Alignment Alternatives and the new construction associated with stations and maintenance facilities. These facilities would include urban and rural locations, potentially joint-operated and joint-developed locations, and at-grade, aerial, and underground locations. Passenger stations include improvements to existing railroad stations and newly constructed stations. Substations and maintenance facilities would be newly constructed structures.

A. CONSTRUCTION WORKSITE CHARACTERISTICS

In urban areas, most worksites would include an expansion of or improvements to existing train stations. In rural areas, most worksites would include new construction along a new alignment independent of existing railroads.

A unique characteristic of construction on existing railroad stations is the need to maintain capacity and passenger levels of service during the construction activities. Unlike highways, where traffic can be diverted to other facilities during construction, railroad stations must be able to accommodate demand and operations because passengers cannot typically be diverted to other facilities. As a result, railroad station improvements require significant coordination and planning to accommodate safe and convenient access for passengers and no disruptions to operations.

The worksite for a new railroad station or maintenance facility most likely would be a constrained parcel of land. The footprint of the new structure and parking area would be available for the contractor's exclusive use. Because parking areas and tail track/storage track areas may be

available, the contractor could make use of these areas as a construction yard. If necessary, adjacent landowners may furnish temporary easements for the contractor to use as a construction yard during construction.

B. TYPICAL CONSTRUCTION SEQUENCE (CONSTRUCTION METHOD)

The typical construction sequence would be:

- Demolition and site preparation—Vacate identified areas within existing structures. Construct new entrances to existing stations if necessary. Close the portion of existing structures to be removed. Construct/install construction fence and barriers. Demolish existing structures scheduled for removal on the worksite. For new facilities, perform earthwork, drainage work, and utility relocation/construction as necessary. For platform improvements or additional platform construction, the necessary track realignment and construction would be required.
- Structural shell and electrical/mechanical rough-in—Construct foundations and structural frames. Construct walls or platforms. Rough-in electrical and mechanical systems.
- Finishes and tenant improvements—Install electrical/mechanical equipment. Install finishes and communications equipment. Construct tenant improvements. The actual construction sequence may have several additional steps if the railroad agency determines that it needs to stage construction, such as completing and occupying a portion of the new work before removing the last of the existing structure for replacement.

Demolition and Site Preparation

The contractor would construct detour roadways, new station entrances, and other elements required to take existing facilities in the worksite out of service. The other elements could be as significant as constructing a new utility company primary service and switchgear if the existing facility is in the way of the expansion.

The contractor would close the roadway, parking, or portion of the station to be removed, install construction fences or barriers, and demolish the existing improvements.

Structural Shell and Electrical/Mechanical Rough-In

The contractor would construct foundations and the structural frame of the new station. The contractor would enclose the new building or construct new platforms and connect the structure to site utilities. The contractor would rough-in electrical and mechanical systems and would install specialty items such as elevators, escalators, and ticketing equipment.

Finishes and Tenant Improvements

The contractor would install electrical and mechanical equipment. The contractor would install communications and security equipment, finishes, and signage. The contractor may install tenant improvements, or developers and other tenants may have their own contractors construct tenant improvements.

C. TYPICAL CONSTRUCTION IMPACTS

The largest impact would be the daily disruption of station activities. There would be little construction impact outside of the station site. Other impacts may include the following, which are considered significant at the program level.

- Construction traffic in the vicinity of the station.

- Operations and planning coordination for platform improvements or new platforms that require trackwork realignment.
- The contractor must take care to maintain or replace the existing utilities as called for in the construction documents, but with care, drainage should not be a problem.
- There may be a substantial volume of demolition debris from the site preparation phase.
- Construction noise generally would be lost in the ambient station noise.
- Night work in the urban station areas would need to be assessed for impacts on residential and commercial (hotel) areas.

The additional worksites along the alignment may include:

- A central control facility.
- Revenue service vehicle storage and maintenance facilities.
- Maintenance-of-way shops and non-revenue vehicle storage.
- Traction power substations and signal/communications bungalows.
- Tunnel ancillary structures (e.g., tunnel emergency egress/access points, tunnel ventilation buildings, tunnel drainage pumping plants).

3.18.6 Mitigation Strategies and CEQA Significance Conclusions

The following mitigation strategies for construction impacts would apply to highway improvements, Monterey Highway adjustments, HST project construction, and HST construction within active rail corridors. These mitigation strategies are either identical to or consistent with mitigation strategies contained in the 2008 Final Program EIR for construction impacts within each subject matter chapter. These strategies can be refined and applied as part of second-tier, project-level EIRs and are anticipated to be effective at reducing construction impacts to a less than significant level.

Construction Period Traffic Mitigation Strategies

- Off-street parking for construction-related vehicles. Identify adequate off-street parking for all construction-related vehicles throughout the construction period. If adequate parking cannot be provided on the construction sites, designate a remote parking area and use a shuttle bus to transfer construction workers to the job site.
- Maintain pedestrian access. Prepare specific construction management plans to address maintenance of pedestrian access during the construction period. If sidewalks are maintained along the construction site frontage, provide covered walkways.
- Maintain bicycle access. Prepare specific construction management plans to address maintenance of bicycle access during the construction period.
- Restrict construction hours. Limit construction material deliveries to outside of peak traffic periods.
- Establish construction truck routes for delivery of all construction-related equipment and materials. Prohibit heavy construction vehicles from accessing the site via other routes.
- Protect public roadways during construction. Repair any structural damage to public roadways, returning any damaged sections to their original structural condition. Survey the condition of the public roadways along truck routes providing access to the proposed project site both before construction and after construction is complete. Complete a before-and-after survey report and submit to the Authority for review, indicating the location and extent of any damage.

- Maintain public transit access and routing. Coordinate with the appropriate transit jurisdiction before limiting access to public transit and limiting movement of public transit vehicles.
- Prepare a detailed construction transportation plan prior to commencing any construction activities, to address in detail the activities to be carried out in each construction phase. Such activities include, but are not limited to, the routing and scheduling of materials deliveries, construction employee arrival and departure schedules, employee parking locations, and emergency vehicle access. The plan would include a traffic control plan that addresses temporary road closures, detour provisions, allowable routes, and alternative access. The plan would also include communication protocols and procedures on how to inform the public on construction activities as well as temporary detours, closures, and changes in transit and existing rail operations.
- Limit construction during special events. Provide a mechanism to prevent roadway construction activities from reducing roadway capacity during special events that attract a substantial number of visitors. Mechanisms to maintain roadway capacity include police officers directing traffic, special event parking, and use of traffic cones and within-the-curb parking or shoulder lanes for through traffic.
- Minimize closure of any proximate highway facility during construction.
- Maintain passenger and freight rail operations within an active rail corridor through close coordination with Caltrain and freight operations (UPRR).
- Require construction contractors to coordinate construction methods, construction activities, best management practices, and mitigation with all applicable local jurisdictions that would be affected by construction.

Construction Period Air Quality Mitigation Strategies

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require that all trucks maintain at least 2 feet of freeboard.
- Pave, apply water three times daily, or apply (nontoxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply (nontoxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Enclose, cover, water twice daily, or apply (nontoxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion-control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Use alternative fuels for construction equipment when feasible.
- Minimize equipment idling time.
- Maintain properly tuned equipment.

Construction Period Noise and Vibration Mitigation Strategies

- Use enclosures or walls to surround noisy equipment, install mufflers on engines, substitute quieter equipment or construction methods, minimize time of operation, and locate equipment further from sensitive receptors.
- Suspend construction operations between 7:00 p.m. and 7:00 a.m. and/or on weekends and holidays in residential areas.
- Require construction contractor to comply with local sound control and noise-level rules, regulations, and ordinances.
- Equip each internal combustion engine with a muffler of the type recommended by the manufacturer.
- Specify the quietest equipment available be used.
- Turn off construction equipment during prolonged periods of nonuse.
- Require contractors to maintain all equipment and train their equipment operators to reduce noise levels and increase efficiency of operation.
- Phase construction activity, use low impact construction techniques, and avoid use of vibrating construction equipment where possible to avoid vibration construction impacts.
- Construct temporary soundwalls along shooflys and other temporary facilities for work conducted within an active rail corridor to reduce noise levels.
- Use "state-of-the-art" construction equipment, materials, and abatement techniques to mitigate construction noise and vibration impacts.
- Notify local residents prior to construction operations.
- Establish a program to receive and respond to residents' concerns regarding noise, vibration, and light disturbances.
- Require construction contractors to coordinate construction activities and mitigation with all applicable local jurisdictions that would be affected by construction.

Construction Period Energy Mitigation Strategies

- Develop and implement a construction energy conservation plan.
- Use energy efficient construction equipment and vehicles.
- Locate construction material production facilities onsite or in proximity to construction sites.
- Develop and implement a program encouraging construction workers to carpool or use public transportation for travel to and from construction sites.

Construction Period Aesthetics and Land Use Mitigation Strategies

- Plan hours of construction operations and locate staging sites to minimize impacts on adjacent residences and businesses.
- Screen construction sites, as appropriate, to minimize visual construction impacts.
- Develop traffic management plans to reduce barrier effects during construction.
- To the extent feasible, maintain connectivity during construction.

Construction Period Hazard Materials and Waste Mitigation Strategies

- Prepare a Site Management Program/Contingency Plan prior to construction to address known and potential hazardous material issues, including management of contaminated soil and groundwater, site-specific Health and Safety Plan to protect construction works and the public, and procedures to protect workers and the general public in the event that unknown contamination or buried hazards are encountered.

Construction Period Cultural Resources Mitigation Strategies

- Stabilization/Monitoring during Construction. Prepare a treatment plan for the protection of historic properties/resources, in close proximity to construction activities.
- Measures to Lessen Adverse Effects. Include stipulations in the contracts of the construction contractors to ensure appropriate preservation of cultural resources minimize project impacts on historic properties/structures.
- Monitoring (Architectural/Cultural Landscape). Monitor project construction documents and new construction to ensure conformance to design guidelines and treatment procedures agreed to by consulting parties. Monitor construction by a qualified professional to identify conditions that conflict with guidelines and treatment procedures.
- Minor Repairs and Reconstruction. Ensure that inadvertent damage to historic properties/resources is repaired in accordance with the Secretary of the Interior's Standards for Treatment of Historic Properties.
- Paleontological Resources. Educate workers, monitor construction, recover fossils, temporary diversion of construction equipment for fossil recovery, and develop protocols for the handling/disposition of fossils discovered during construction.

Construction Period Geology and Soils Mitigation Strategies

- Conduct geotechnical inspections during construction to verify that no new, unanticipated conditions are encountered related to slope stability/landslides.
- Identify areas of potentially difficult excavation to ensure safe practices and monitor conditions during and after construction.
- Follow regulatory requirements for excavations in oil and gas fields, consult with agencies regarding known areas of concern, use safe and explosion-proof equipment during construction, regularly test for gases, install monitoring systems and alarms in underground construction areas where subsurface gases are present, and install gas barrier systems or gas collection systems and passive or active gas venting systems in areas where subsurface gases are identified.

Construction Period Water Quality Mitigation Strategies

- Implement the Storm Water Pollution Prevention Plans (SWPPPs) and requirements of the National Pollutant Discharge Elimination System (NPDES) permits including Best Management Practices (BMPs) to minimize short-term increases in sediment transport caused by construction and may include measures to provide permeable surfaces where feasible and to retain and treat stormwater on site using catch basins and treatment (filtering) wet basins.
- Implement BMPs which would include practices to minimize impacts to stormwater, reduce erosion of exposed soil, and maintain water quality.
- Implement a spill prevention and emergency response plan to handle potential fuel or other spills.
- Incorporate biofiltration swales to intercept surface runoff.

Construction Period Biological Resources Mitigation Strategies

- Plant Communities: Conduct plant community construction monitoring, onsite and/or offsite revegetation/restoration, and purchase of credits from an existing mitigation bank.
- Prepare Biological Resources Management Plans (BRMP) that specify the design and implementation of biological resources mitigation measures, including habitat replacement and revegetation, protection during construction, performance (growth) standards, maintenance criteria, and monitoring requirements.
- Sensitive Plant Species: Conduct preconstruction focused surveys for sensitive plant species and map on construction drawings, construction monitoring, relocation of plants, seed collection, plant propagation, outplanting to a suitable mitigation site, and participation in an existing Habitat Conservation Plan (HCP).
- Weed Prevention: Implement weed prevention measures during construction that includes identification of areas with existing weed problems and measures to control traffic moving out of those areas (e.g., cleaning construction vehicles, limiting movement of fill).
- Sensitive Wildlife Species: Conduct reconstruction focused surveys for sensitive wildlife species and map on construction drawings, construction monitoring, restoration of suitable breeding and foraging habitat, purchase of credits from an existing mitigation bank, and participation in an existing HCP. Construction could be phased to avoid breeding season for sensitive wildlife species.

Construction Period Section 4(f) and 6(f) Resources Mitigation Strategies

- Develop and implement construction practices, including scheduling, to limit impacts on wildlife, wildlife corridors, and visitor use areas within public parks.

Construction Period Safety and Security Mitigation Strategies

- Prior to the commencement of construction, contractors would conform to safety training requirements of the respective rail operators (Caltrain and UPRR) when work occurs within an active rail corridor.
- Fencing and signage would be utilized to physically buffer construction sites from public space as well as to provide sufficient warning to the public. The vulnerability of construction sites would be minimized through the use of fencing which would act as a deterrent to vandalism and trespassing.

The above mitigation strategies are generally accepted best practices during construction and are consistent with the types of construction mitigation typically implemented with heavy civil construction projects. Consistent with the conclusions reached in the 2008 Final Program EIR, these mitigation strategies, at this program level of detail, are anticipated to be effective at avoiding construction impacts or reducing them to a less than significant level with regard to the following resource areas:

- Air quality
- Noise
- Energy
- Hazardous materials and wastes
- Geology and soils
- Hydrology and water resources

Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce the impacts from construction of the project to a less than significant level in all circumstances with regard to the following resource areas:

- Vibration
- Traffic (specifically, localized increases in traffic and congestion near HST-station areas and during construction)
- Land use (specifically, neighborhood disruption)
- Aesthetics and visual quality (specifically, short-term visual quality impacts)
- Cultural resources
- Biological resources
- Parks and recreation

This document therefore concludes that construction impacts may be significant, even with the application of mitigation strategies, in the above-referenced areas, ~~of vibration, station area traffic, neighborhoods, short term visual quality, archeological and historical resources, wildlife movement corridors, and parks and recreation.~~ With regard to all other resource areas, consistent with the conclusions reached in the 2008 Final Program EIR, these mitigation strategies, at this program level of detail, are anticipated to be effective at avoiding construction impacts or reducing them to a less than significant level.

5 NEW INFORMATION AND CHANGED CONDITIONS SINCE SEPTEMBER 2, 2010, PRIOR DECISIONS

As part of the development of this document, new information subsequent to the Authority's September 2, 2010, decision has been considered to determine whether it has an effect on prior Program EIR analysis that would require revisions. This chapter discusses the types of new information reviewed and the conclusions about the information. The analysis has been guided by the consideration of whether the information constitutes "significant new information" under CEQA, as guided by CEQA Guidelines, § 15088.5. This chapter also includes a brief additional discussion and programmatic analysis related to grade separations. Changes to text from the Partially 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.

5.1 New HST Project Information Subsequent to September 2, 2010, and Effect on Program EIR Analysis

5.1.1 Information on HST Project Sections

A review was performed of the documentation generated as part of development of project level EIR/EISs for the San Francisco to San Jose, San Jose to Merced, Sacramento to Merced, and Merced to Fresno sections of the HST project. Each of the HST project sections are at different stages in the project-level EIR/EIS process. The major environmental activities on the San Francisco to San Jose section were put on hold as of May 2011, and further work toward completing the San Francisco to San Jose Draft EIR/EIS was halted. The development of the Draft EIR/EIS for the San Jose to Merced section is underway, but not completed. The Draft EIR/EIS for the Sacramento to Merced section is underway, but environmental work on this section has been limited.

The major focus for the Authority has been on the Central Valley sections from Merced to Fresno and Fresno to Bakersfield, of which only the Merced to Fresno section overlaps with the study area for this Program EIR. The Merced to Fresno section Draft EIR/EIS circulated for public comment in the fall and preparation of the Final EIR/EIS is underway. This section, which has an overlap with the Bay Area to Central Valley Program EIR study area, has been based on a wye connection to a Pacheco Pass crossing to the Bay Area. As disclosed in that Draft EIR/EIS, however, the Authority will not make a decision on the wye area based on the Merced to Fresno EIR/EIS, and will study the wye connections to the Bay Area in a subsequent EIR/EIS, either for San Jose to Merced or for an alternative Altamont crossing, depending on the outcome of this Program EIR process. The portion of the Merced to Fresno second-tier project for which a decision is proposed is also tiered from the Authority's 2005 Statewide HST Program EIR.

The City of San Jose in cooperation with the Authority issued an in-progress draft of Visual Design Guidelines for the HST project within the City of San Jose. The Guidelines have not been approved or adopted by either the City of San Jose or the Authority at this time, but represent additional design concepts for the City of San Jose that may be carried forward as part of project-level EIR/EIS work.

Based on the review of the HST project documentation for the various sections subsequent to the September 2, 2010, prior programmatic decisions, it was determined that these project-level processes have not generated new information that would necessitate further revision of the Program EIR. Specifically, the project-level processes have resulted in refinements to the horizontal placement of the alignment alternatives and consideration of profile variations (below grade, at grade, above grade). This type of design detail is appropriately considered in second-tier, project-level environmental documents because it does not prevent adequate identification of the impacts of the programmatic decision at hand.

In contrast to the type of design refinement discussed above, additional work examining alternatives as part of the second-tier project-level environmental evaluation for San Jose to Merced has resulted in consideration of multiple different alignment options for the area immediately south of the San Jose station and approximately one mile to the south. The multiple alignments in this area have been developed as part of project-level alternatives screening to identify options that would reduce land use, noise, and community effects. Based on this work, the program alignment that would parallel the Caltrain Corridor in this roughly one-mile stretch approaching the San Jose station from the south has been replaced by an alignment that would cross over SR-87 and I-280 as shown in Figure 5-1. While many areas of the HST alignment in the San Jose to Merced area have been subject to refinements, the evolution of the design in this area has resulted in , a different design solution that departs from the Caltrain Corridor and represents a different linear alignment than the program alignment.

Figure 5-1
San Jose to Merced: SR-87/I-280 Alignment Comparison to Program Alignment



The SR-87/I-280 Alignment Alternative as shown in Figure 5-1 would have differences in environmental impact from the prior program alignment along the Caltrain corridor (also shown in Figure 5-1) in the following respects:

- Noise and vibration impacts based on programmatic screening, as well as consideration of the new location of the alignment as necessarily elevated to cross SR-87 and I-280, would result in the same medium ranking for noise and vibration for the San Jose station area, as well as for the alignment itself, which is categorized as part of the Pacheco alignment in the 2008 Final Program EIR. The screening process captures fewer sensitive receptors for the SR 87/I 280 Alignment Alternative than for the program alignment, but out of an abundance of caution the ranking is deemed medium. At the program level, for the Pacheco alignment as a whole, the difference in this one-mile area does not change the conclusion that noise and vibration impacts are significant under CEQA.
- Land use and community cohesion impacts would be lower for the SR-87/I-280 Alignment Alternative than for the program alignment because the HST would utilize the existing freeway

corridors for much of the station approach, requiring fewer residential and business displacements, and also would be located further from the Greater Gardner community. Land use, community, and property impacts in this area would still be considered significant under CEQA.

- Aesthetic and visual impacts would be slightly different. The program alignment, including elevated portions south of San Jose station were deemed to have low visual impacts in the 2008 Final Program EIR, and were considered significant under CEQA. The SR-87/I-280 alignment would traverse the two freeway corridors on a longer elevated structure than for the program alignment, but this structure would be over existing freeways. The low visual impact ranking would therefore be the same. As with the previous program alignment south of the station, the visual impacts are still considered significant under CEQA.

At the program level, other resource area impacts would be the same as described in the 2008 Final Program EIR.

5.1.2 Information on Altamont Corridor Rail Project

The Altamont Corridor Rail Project is a proposed regional intercity and commuter passenger rail project between Stockton and San Jose as a complementary project to the HST system. The Authority has worked under agreement with a regional partner, the San Joaquin Regional Rail Commission (SJRRC), to plan a joint-use rail line through the Altamont Pass that would support new regional intercity and commuter passenger rail services operating in northern California between Stockton and San José as well as eastern and southern Alameda County. The Authority and the SJRRC are proposing to develop a new joint-use rail line to improve connectivity and accessibility between the northern San Joaquin Valley and the Bay Area. The rail line would be designed and equipped to accommodate electrified lightweight passenger trains and could be used by HST-compatible equipment at intermediate speeds.

Subsequent to the Authority's 2010 Revised Final Program EIR, work has progressed on the Altamont Corridor Rail Project, resulting in a ~~January~~ February 2011 Preliminary Alternatives Analysis Report examining various route alternatives to identify those appropriate for consideration in an EIR/EIS. Based on a review of this documentation, it was determined that the information related to the Altamont Corridor Rail Project does not necessitate further revision of the Program EIR. This conclusion is based on the fact that the Altamont Corridor Rail Project has a different purpose and need and project objectives that are focused on regional transportation connectivity rather than the northern California/southern California connectivity of the HST. In addition, the Altamont Corridor Rail Project has different design and performance criteria than the HST, including slower speeds allowing for a more curved alignment than HST, and no requirement for passing tracks at stations. These differences distinguish the conceptual route alternatives in the Altamont Corridor Rail Project Preliminary Alternatives Analysis Report from HST alignments.

5.1.3 Draft 2012 Business Plan and Revised 2012 Business Plan

The Authority's Draft 2012 Business Plan (November 2011) and Revised 2012 Business Plan (April 2012), ~~which was released in November 2011~~, have also been considered in the development of ~~the~~ Partially Revised Draft Program EIR and Partially Revised Final Program EIR. The purpose of the ~~Draft~~ Business Plan is to comply with the requirements of Public Utilities Code section 185033, which requires the Authority to develop a plan with the content specified in the statute, and offer it for public review and comment. The plan represents an implementation strategy for construction of the HST system. This implementation strategy describes a phased approach, consistent with how high-speed train projects are built around the world and how other major infrastructure in California has been developed, including the California State Water Project and State highway system. Consistent with statutory requirements, the Authority will consider adoption of the Revised 2012 Business Plan at a publicly noticed Board meeting. The following discussion refers to the Revised 2012 Business Plan, except where reference to the Draft

2012 Business Plan is helpful in identifying differences in the implementation strategy approach that evolved between November 2011 and March 2012.

A. THE DRAFT 2012 BUSINESS PLAN, THE REVISED 2012 BUSINESS PLAN, AND PHASED IMPLEMENTATION

The concept of phasing is not new for the HST system. Proposition 1A, passed by voters in 2008, contemplated that Phase 1 of the HST system would extend from San Francisco in the north to Los Angeles in the south, and that Phase 2 would then connect to Sacramento and San Diego.

The discussion of phasing in the Draft and Revised 2012 Business Plan expands on this initial phasing described in Proposition 1A, and illustrates how construction of the statewide HST would be accomplished in further sub-phases (phases of implementation), as funding is available and project-level environmental review for individual sections of the system is completed. The first initial construction section (ICS) is planned from north of Fresno to north of Bakersfield. Under the Revised 2012 Business Plan, t~~This first construction ICS~~ would then be extended either over the Pacheco Pass to San Jose, as an Initial Operating Section north (IOS north), or south to the San Fernando Valley, as an Initial Operating Section ("IOS") south (IOS south). The IOS ~~(either north or south)~~ would then be extended north to complete a "Bay to Basin" system extending from San Jose to the San Fernando Valley. The Bay to Basin system could then be extended to reach San Francisco in the north and Los Angeles/Anaheim in the south to complete Phase 1 of the system. Phase 2 of the system would expand Phase 1 to include from Merced north to Sacramento, and from Los Angeles south to San Diego.

The Revised 2012 Business Plan includes an emphasis on a blended system approach, early investments, and delivering early benefits to California travelers by using and leveraging investments as they are made. In contrast to the Draft 2012 Business Plan, which would have extending initial construction outward from the Central Valley and reach the urbanized areas of the San Francisco Bay and the Los Angeles Basin last, the Revised 2012 Business Plan prioritizes early investments in these "bookend" sections to upgrade existing rail services, improve safety, and build train ridership as a foundation for the HST system. These early investments are intended to proceed in the same general timeframe as the ICS construction in the Central Valley, so that the book-end sections see improvements earlier than identified in the Draft 2012 Business Plan.

The ~~Draft~~Revised 2012 Business Plan, which includes the phased implementation of the HST system, reflects that the cost of building the system will be higher than originally anticipated. In addition, phased implementation recognizes that funding for construction will not become available all at once, and therefore construction of the system will take longer than originally anticipated. For example, the 2008 Final Program EIR anticipated that the HST system would be fully constructed in phases and operational in roughly 2020. The ~~Revised~~Draft 2012 Business Plan discloses that with phased implementation, and in light of increased costs and limits to financing, construction may take considerably longer, with completion of a Bay to Basin system in 2026, a Phase 1 blended system (see below) in 2028, and a full Phase 1 system occurring in 2033.

For the highly urbanized sections between San Francisco and San Jose, San Fernando Valley and Los Angeles, as well as Los Angeles to Anaheim, a concept called a "blended system approach" is also described in the ~~Draft~~Revised 2012 Business Plan. The blended system would provide an additional phasing option for the urbanized sections that have existing commuter rail corridors, which would allow for integrating HST service into an existing commuter rail system with certain, limited upgrades, in advance of construction of the currently planned shared or dedicated HST facilities. For example, a passenger traveling from Los Angeles could potentially travel on dedicated, fully constructed HST facilities to a particular station, such as San Jose, and then continue with a "one-seat ride" that would have the HST complete its journey to San Francisco on an upgraded and electrified commuter rail line at slower speeds. The blended system concept has the potential to provide earlier travel benefits by

allowing some level of HST service to reach San Francisco, Los Angeles, and Anaheim with a smaller investment than would be required for the fully constructed HST facilities. This approach was highly conceptual at this time of release of the Draft 2012 Business Plan in November 2011. The blended system approach remains conceptual in the Revised 2012 Business Plan, however, some additional information has been included. With respect to the Caltrain corridor between San Francisco and San Jose, the proposal is for a primarily two-track system shared by Caltrain and HST that would stay substantially within the existing right-of-way. Key improvements to support a blended system approach include an advanced signal system, electrification of the rail alignment, and infrastructure upgrades such as grade separations or grade crossing improvements.

The Revised Draft-2012 Business Plan illustrates the HST system and phased implementation with a crossing between the Bay Area and the Central Valley over the Pacheco Pass. The Revised 2012 Draft Business Plan identifies that it is illustrative, and is not intended to indicate any precommitment or approval of any project prior to CEQA compliance. ~~is a draft, and is currently circulating for its own statutorily required public comment period which will close on January 16, 2012, and has not been approved by the Authority Board as of the release of this Partially Revised Draft Program EIR.~~ If the Authority makes a different decision on the HST network alternative to connect the Bay Area to the Central Valley, the phased implementation approach described in the Business Plan would be adjusted as necessary and is anticipated to be equally effective whether the train travels over the Pacheco Pass or the Altamont Pass. Similarly, the blended system approach~~concept~~ has the potential to be effective for both Altamont Pass and Pacheco Pass network alternatives.

B. PHASED IMPLEMENTATION AND PRIOR PROGRAM EIR ANALYSIS

Phased implementation does not change the HST project described and analyzed in the 2008 Final Program EIR, the 2010 Revised Final Program EIR, or in this Partially Revised ~~Draft-Final~~ Program EIR. The Authority's proposed first-tier project continues to be the statewide HST system connecting the Bay Area and Central Valley, consistent with its statutory mission, and as described in Chapters 1 and 2 of the 2008 Final Program EIR. The Revised Draft 2012 Business Plan does explain, however, that the necessity of phased implementation will result in a longer construction period for the HST project and a later date for full operation than previously anticipated. In addition, in accordance with statutory requirements, the Business Plan presents an array of ridership forecasts that are lower than those previously used for the 2008 Final Program EIR, because they represent more conservative assumptions for investment and business planning purposes. The longer duration of construction and also lower ridership forecasts may result in differences in the environmental impacts and benefits as described in the 2008 Final Program EIR, the 2010 Revised Final Program EIR, and in this document. This discussion provides a qualitative, general assessment of these differences. The environmental consequences of phased implementation would be explored in more detail as part of second-tier, project level EIRs.

Statewide and Regional Environmental Benefits from the HST Will Accrue More Slowly

In general, phased implementation and consequently lower ridership means that the statewide environmental benefits of the HST system, including traffic improvement on major highways and freeways (reduced vehicle miles travelled or VMT), reduced energy consumption, and improved air quality, will accrue more slowly than described in the 2008 Final Program EIR. This is the case because the benefits of the HST system as a whole are based on its operation, and its ability to shift automobile and aircraft trips to HST trips, thereby reducing VMT, reducing air pollution, and saving energy. These benefits will begin to accrue once an initial HST system is operating, and will build over time as the entire HST infrastructure is placed in operation. Accordingly, the benefits described in the 2008 Final Program EIR as of 2030 will be lower. Nevertheless, these benefits will continue to accrue over many decades beyond the 2030 time horizon evaluated in the 2008 Final Program EIR and these benefits will be achieved, just more slowly.

Localized Adverse Impacts from Construction of Phased Sections Will Be Delayed

In addition, the adverse environmental impacts and project benefits on a more local scale may not occur for the end point sections of the selected network alternative for a longer period of time (e.g. San Jose to San Francisco, San Jose to Oakland, Union City to San Jose and Union City to Oakland). For stations that would become an interim northern terminus, unique consequences would be in the areas of traffic congestion around the station, parking demand, and the potential increased demand for local feeder services from HST passengers arriving at the northern terminus station seeking to transfer to the local service.

Phasing May Change the Level and Duration of Adverse Traffic Congestion at Temporary Northern Terminus Stations and May Create a New Adverse Impact on Connecting Commuter Rail Services

The Revised 2012 Draft Business Plan proposes a "Bay to Basin" phase that relies on the concept of reaching the major population centers in both northern and southern California with the HST service and then providing seamless intermodal connections with the existing regional commuter rail and transit services to complete the trip to the major HST destination cities such as San Jose, San Francisco, Oakland, Los Angeles and Anaheim. For purposes of this analysis, the Bay to Basin phase has been examined to identify how it would differ from the full system implementation described and analyzed in the 2008 Final Program EIR. The Bay to Basin level of ridership would be approximately a third of the full system ridership. For example, in the case of the two "base" Network Alternatives for the Program EIR (A1 - Altamont to San Jose and San Francisco and P1 - Pacheco to San Jose and San Francisco), their annual ridership would be reduced from roughly 88 million to 28 million and from roughly 93 million to 30 million riders respectively. In general, the lower level of ridership has the potential to reduce adverse impacts for station area traffic congestion and station area air quality impacts, which were conservatively described in the 2008 Final Program EIR. This is the case because lower ridership in general means lower levels of access and egress to the HST stations. As discussed in the following examples, however, there are unique differences in impacts that would occur at a temporary northern terminus station for a Bay to Basin phased system that would be different than as described in the 2008 Final Program EIR.

Pacheco Pass Network Alternative Example With San Jose Temporary Northern Terminus

Traffic impacts around the San Jose station with the HST at full system ridership were not expected to be significant. (2008 Program Final EIR, Chapter 3.1.) However, if San Jose were a temporary northern terminus station as part of a Pacheco Pass network alternative, even with the reduction in total system-wide ridership from a Bay to Basin phase rather than the full system, the total number of passengers getting on trains in San Jose would be considerably higher than under the full build scenario (around 9.0 million per year for a Bay to Basin system versus 4.0 – 5.8 million per year for the full system, depending on Network Alternative). The reason for this is straightforward: if the HST is not able to provide a "one seat ride" from south of San Jose to San Francisco, then the north bound passengers need to travel by some other means to get to their final destination on the Peninsula or in San Francisco. For purposes of this analysis, the majority of these travelers (half to two-thirds) are assumed to be transferring at San Jose from high-speed trains to Caltrain trains and vice versa with most of these passengers never leaving the station. Consequently the number of riders per day accessing the HST system at San Jose by road (auto, taxi, rental car, buses and shuttles) would be less in the Bay to Basin phase than it would in the full system (6,000 – 7,000 for Bay to Basin phase versus 8,000-9,000 for full system). This change in access mode from automobile to Caltrain could reduce the station area traffic impacts and parking demand described in the 2008 Final Program EIR for the full system scenario at a San Jose station.

There remains a possibility, however, that station area traffic impacts in San Jose in a Bay to Basin phase could be higher if the percentage of riders disembarking at San Jose and traveling by road to San Francisco or other Bay Area destinations is higher. For purposes of this analysis, traffic impacts at the San Jose station from an interim Bay to Basin phase are identified as potentially significant.

Mitigation strategies to address station area traffic congestion include both regional and local strategies as outlined in Chapter 3.1, Section 3.1.5 of the 2008 Final Program Level EIR:

Regional Strategies:

- Coordinate with regional transportation (highway and transit) planning (e.g., regional transportation plans, congestion management plans, freeway deficiency plans, etc.).
- Implement Intelligent Transportation Systems Strategies (ITS).

Local Strategies:

- Work with public transportation providers to coordinate services and to increase service and/or add routes, as necessary, to serve the HST station areas.
- Provide additional parking for the interim period.
- Consider offsite parking with shuttles.
- Share parking strategies.
- Implement parking permit plans for neighborhoods.
- Employ parking and curbside use restrictions.
- Develop and implement a construction phasing and traffic management plan.
- Widen roadways.
- Install new traffic signals.
- Improve capacity of local streets with upgrades in geometrics, such as providing standard roadway lane widths, traffic controls, bicycle lanes, shoulders, and sidewalks
- Install modifications at intersections, such as signalization and/or capacity improvements (widening for additional left-turn and/or through lanes)
- Coordinate and optimize signals (including retiming and rephrasing)
- Designate one-way street patterns near some station locations
- Implement turn prohibitions
- Use one-way streets and traffic diversion to alternate routes
- Minimize closure of any proximate freight or passenger rail line or highway facility during construction.

The above mitigation strategies would be refined and applied at the project level and are expected to substantially avoid or lessen impacts around station areas to a less-than-significant level in most circumstances. Planning multi-modal stations, coordinating with transit services, providing accessible locations and street improvements, and encouraging transit-oriented development in station areas would help to ease traffic constraints in station areas. At the project level, it is expected that for various HST station projects, impacts would be mitigated to a less-than-significant level, but it is possible that some stations impacts would not be mitigated to the less-than-significant level. Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce impacts around stations to a less-than-significant level in all circumstances, including in a situation where San Jose would be a temporary northern terminus under a Bay to Basin phased approach to HST construction. Traffic impacts around station areas may be significant, even with the application of mitigation strategies. Additional environmental assessment will allow a more precise evaluation in the second-tier, project-level environmental analyses.

There is the potential that the number of passengers transferring between Caltrain and the HST system at San Jose could result in significant impacts to the Caltrain system including overcrowding of trains with HST passengers and consequently displacing regular Caltrain passengers. This would result in a new significant impact under CEQA that was not described previously in the Program EIR. This adverse impact on Caltrain commuter rail service would be resolved once the San Jose station becomes a “through” station and HST passengers are no longer required to transfer to and from the Caltrain service to complete their journey. However, in the interim, there could be the need for mitigation of the additional passengers on the Caltrain system as a result of the San Jose station operating as a terminal. Mitigation strategies to increase the capacity of the Caltrain system include:

- Adding more train cars (i.e., seats) to the existing train consists.
- Providing additional and more frequent Caltrain train service to and from San Jose.
- Providing a dedicated train service that would specifically serve the HST customers between San Francisco and San Jose.
- Working with public transportation providers to add or enhance connectivity to commuter rail stations.
- Providing commuter station improvements (i.e., interim additional on-site or off-site parking, expanded or enhanced waiting areas for passengers).

These mitigation strategies are expected to be effective in substantially lessening the potential impact on Caltrain commuter service, however with the available information it is not clear that these strategies would reduce the impact to a less than significant level. For purposes of this programmatic assessment, the impact on Caltrain commuter service is therefore considered significant even with application of mitigation strategies. As second-tier, project-level environmental documents are prepared, the potential consequences of phased implementation on connecting commuter rail service will be evaluated in more detail.

Altamont Pass Network Alternative Example With East Bay (Union City) Temporary Northern Terminus

Traffic impacts around the Union City station with the HST at full system ridership were not expected to be significant. (2008 Program Final EIR, Chapter 3.1.) Although there are not comparable 2012 Draft Business Plan forecasts for a Bay to Basin phase that terminates in an East Bay location such as Union City, it can be inferred that under a Bay to Basin phase that the same order-of-magnitude volume of passengers in San Jose in the Bay to Basin phase would be found at an East Bay (Union City) terminal. This would imply roughly 9 million annual passengers boarding in 2030 in a Bay to Basin Phase with an interim northern terminus at Union City. Similar to the San Jose example above, half to two-thirds are assumed to connect to the HST system via BART at the Union City station. Although most of the transferring passengers from the HST to the BART system would not be leaving the station, the total number of passengers accessing the HST system by auto and other road-based modes could be roughly 3 million passengers per year. This Bay to Basin phase number is far greater than the number of passengers accessing the station by auto and other road-based modes under the full system scenario (3 million for Bay to Basin phase versus less than 500,000 for full system). Under the Bay to Basin phase, the change in total ridership at Union City and access mode from auto to BART would increase traffic impacts and the demand for parking, resulting in a new significant impact under CEQA for the Union City station that was not described previously in the 2008 Program EIR.

The mitigation strategies listed above for the San Jose station are available to address station area traffic congestion, including the impacts if Union City is a temporary northern terminus in a Bay to Basin phased scenario. Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce impacts around stations to a less-than-significant level in all circumstances, including in a situation where Union City would be a

temporary northern terminus under a Bay to Basin phased approach to HST construction. Traffic impacts around station areas may be significant, even with the application of mitigation strategies. Additional environmental assessment will allow a more precise evaluation in the second-tier, project-level environmental analyses.

The number of passengers transferring between the HST system and the BART system could result in potentially significant impacts to the BART system, including overcrowding of trains with HST passengers and consequently displacing regular BART passengers. This situation would be resolved once the Union City station becomes a "through" station and HST passengers are no longer required to transfer to and from the BART service to complete their journey. However, in the interim, there could be the need for mitigation of the additional passengers on the BART system as a result of the Union City station operating as a HST terminal. Mitigation strategies to address the need for increased capacity of the BART system include:

- Adding more train cars (i.e., seats) to the existing train consists
- Providing additional and more frequent BART service to and from Union City
- Working with public transportation providers to add or enhance connectivity to commuter rail stations.
- Providing commuter station improvements (i.e., interim additional on-site or off-site parking, expanded or enhanced waiting areas for passengers).

These mitigation strategies are expected to be effective in substantially lessening the potential impact on BART service, however with the available information it is not clear that these strategies would reduce the impact to a less than significant level. For purposes of this programmatic assessment, the impact on BART service is therefore considered significant even with application of mitigation strategies. As second-tier, project-level environmental documents are prepared, the potential consequences of phased implementation on connecting BART service will be evaluated in more detail.

Conclusion Regarding Impacts at Temporary Northern Terminus Stations

The examples provided above are just two possible temporary northern terminus locations for a phased approach for bringing HST service to the Bay Area by either the Pacheco Pass or the Altamont Pass Network Alternatives. Phasing of the HST system remains uncertain, and the purpose of this discussion is to disclose at a programmatic level the general types of differences that a phased approach would have in terms of environmental impacts and benefits. In conclusion, phased implementation of the HST project would alter the timing and duration of adverse environmental impacts and benefits discussed in the 2008 Final Program EIR and the 2010 Revised Final Program EIR, and would be anticipated to create new significant impacts in the temporary northern terminus station in the areas of station-area traffic congestion and impacts on connecting commuter rail service. As second-tier, project-level environmental documents are prepared, the potential consequences of phased implementation on the temporary northern terminus station area will be evaluated in more detail.

C. BLENDED SYSTEM CONCEPT AND PRIOR PROGRAM EIR ANALYSIS

The blended system discussed in the ~~Revised Draft~~ 2012 Business Plan would provide for a HST to reach its end-point destination by traveling a portion of the trip on upgraded commuter rail lines. This approach is highly conceptual at this time. The blended system is an additional potential method of phasing that could have differences in environmental impact from those discussed above. In general, if a blended system approach were to be implemented along the Caltrain Corridor between San Jose and San Francisco, it would delay the environmental impacts associated with expanding the right-of-way for a four-track, shared alignment. For example, local land use and property adverse impacts would be delayed. The benefits of grade separations that would occur with

the full HST project, including the traffic circulation and noise reduction benefits, would also be delayed.

To ensure adequate consideration of any first-tier, programmatic implications of a blended approach for second-tier projects, a sample blended approach was defined for the San Francisco to San Jose corridor that would be primarily two tracks, except where the right-of-way currently has four tracks. The blended approach would involve electrification of the rail corridor, advanced signaling systems, and would include some grade separations, but was assumed to not be fully grade separated. An assumption was used involving HST running two to four trains per hour during the peak period each direction, and one to two trains per hour during the off peak period, in contrast to a full, four track alignment that would involve 10 trains per hour during the peak period and six trains per hour during the off-peak period per direction.

Considering this sample, illustrative scenario, the environmental impact differences explained above can be further amplified as follows:

- Fewer traffic, air quality, noise & vibration, energy, aesthetic, water quality, property, hazardous materials/wastes, cultural, and biological resources impacts from construction due to the lesser amount of civil construction involved than for the full four-track alignment. Rather than expanding the existing right-of-way, the right-of-way would remain predominantly the same and construction would occur mainly in this already disturbed, active rail corridor.
- Fewer localized traffic impacts at stations, elimination of adverse traffic effects from potential lane loss along Peninsula streets, less noise and vibration from operating trains, elimination of potential impact of moving freight trains incrementally closer to existing residences and businesses, less operational energy used, and fewer aesthetics impacts from operations due to the comparatively fewer high-speed trains per hour and per day. The fewer high-speed trains per hour would result in a great reduction in impacts from operations.
- Lower project benefits in the areas of vehicle miles travelled reduction, air quality benefits and GHG emissions reductions, and less total energy savings relative to other transportation energy needs due to fewer high-speed trains per hour in operation. The benefits of eliminating all at-grade crossings, and therefore eliminating the noise associated with train horns and crossing gates, would also be reduced.

In the areas of safety and localized traffic, the implications of a blended system approach are very speculative until a more refined proposal is put forward. The safety impacts of introducing additional trains onto the Caltrain corridor may result in some safety improvements relative to the existing condition if the blended system approach includes key grade separations. Without full grade separation, as proposed and evaluated in the Program EIR as part of the four-track system, the safety implications will depend on currently unknown factors, such as the number and location of key grade separations, and the type of safety enhancements at remaining at-grade crossings, if any. In general, the lack of complete grade separation would appear to result in reduced safety benefits as compared to the four-track, fully grade separated alignment.

Local traffic effects of introducing additional trains onto the Caltrain corridor with a blended system approach are also highly speculative. In general, the grade separation proposed as part of the four-track alignment analyzed in the Program EIR provides traffic circulation benefits by eliminating the congestion of traffic having to stop for passing commuter trains. This local traffic benefit would be eliminated in those areas that do not have grade separation. The local traffic effects of potential lane reductions adjacent to a four-track alignment would also be eliminated, or largely eliminated with a blended system, because the blended system would operate predominantly within the existing right-of-way. The one area of potential, adverse local traffic impact is in the area of localized congestion from additional trains, resulting in additional periods of traffic being stopped at the at-grade crossings.

5.2 Changed Conditions and Effect on Program Environmental Setting and Analysis

An evaluation of the environmental setting was conducted to assess whether conditions have changed across the study area in a manner that would necessitate a change in the Program EIR. Based on the evaluation, it was determined that the description of the environmental setting of the study corridors and station area cities described in the 2008 Final Program EIR, and as augmented by the 2010 Revised Final Program EIR, remains accurate. While specific conditions have changed in different cities and counties since the 2008 Final Program EIR and the 2010 Revised Final Program EIR, with new development projects under consideration, approved, and/or under construction, these changes are consistent with the general descriptions in each chapter of the environmental analysis and do not raise new environmental impact issues. Likewise, the economic recession has resulted in changes to the economic characteristics across the study area, as well as resulted in some planned and approved development projects no longer proceeding forward. These localized changes do not raise new environmental impact issues.

5.3 Additional Consideration of Grade Separations

As part of this Partially Revised ~~Draft-Final~~ Program EIR, additional consideration has been given to the impacts of grade separations that would be a component of the HST project to clarify that these impacts are significant at the program level. The high-speed train design criteria require it to be fully grade separated from all crossing transportation facilities. To accomplish grade separations, the HST could be placed over or under the perpendicular facility, or the perpendicular facility could be placed over or under the HST alignment. It is also possible for a grade separation to be accomplished by blending the configuration, and having a perpendicular road partially lowered and the HST partially raised. Finally, it is also possible for certain roads to be closed. No decision will be made at the program level regarding how to accomplish grade separations or whether to close certain roads.

The precise impacts of a particular grade separation or groups of grade separations cannot be evaluated at the program level, because the impacts are dependent on design details that are not available. Nevertheless, certain broad statements about the impacts of implementing grade separations can be made. In general, grade separations would result in the same types of adverse impacts described for the HST alignments as described in the 2008 Final Program EIR. These impacts include the need for real property, displacement of existing land uses, impacts on biological, hydrological, and parks resources, visual effects, the potential for impacts to cultural resources or public utilities, potential hazardous materials effects, as well as traffic, air quality, and noise and vibration effects. Grade separations also have the potential for beneficial impacts, including improved traffic circulation, reduced noise from eliminating existing railroad crossing noise, improved vehicular and pedestrian safety, and improved community cohesion. The level of impact or benefit is dependent on the particular design. At a programmatic level, the impacts associated with grade separations are considered significant, particularly in light of the uncertainty associated with how they would be accomplished. The mitigation strategies to address these impacts from grade separations are the same as the strategies identified in the impacts analysis in 2008 Final Program EIR for each resource area. At the program level, out of an abundance of caution, the impacts of grade separations are considered significant even with the application of mitigation strategies since more detailed design information is needed to conclude otherwise.

6 PARTIALLY REVISED FINAL PROGRAM EIR AND RECOMMENDATION 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 and 2010 Revised Final Program EIR; synthesizes the information contained in Chapters 2—5 of the Partially Revised Final Program EIR; and discusses the effect of this information on the staff recommendation of the preferred alternative. The staff recommendation of the preferred alternative in 2012 is consistent with its prior recommendations: Pacheco Pass Network Alternative Serving San Francisco via San Jose.

This chapter replaces Chapter 8 of the 2008 Final Program EIR and Chapter 7 of the 2010 Revised Final Program EIR. This chapter builds on the prior discussions of the preferred alternative, and maintains much of the prior discussion to provide context and to reflect the extensive record of public input on the selection of a preferred alternative to connect the Bay Area and Central Valley. Cost figures presented here are expressed in 2006 dollars, consistent with how they have been presented since the 2007 Draft Program EIR. Although cost information has not been updated to reflect current year dollars, this cost information has been reviewed, and has been determined to continue to provide an appropriate order of magnitude discussion of cost relationships of certain alignments, particularly the high cost of a Transbay Tube, or the relatively higher cost of network alternatives that service three cities rather than one or two.

Changes to text from the Partially 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.

6.1 Recommendation of Pacheco Pass Network Alternative Serving San Francisco via San Jose as Preferred Alternative in 2008 and 2010

Chapter 8 of the 2008 Final Program EIR and Chapter 7 of the 2010 Revised Final Program EIR concluded that the Pacheco Pass Network Alternative serving San Francisco via San Jose was the preferred alternative for connecting the Bay Area with the Central Valley as part of the statewide high-speed train system. 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.

The 2010 Revised Final Program EIR (Chapter 7) provided additional information to be considered in selecting the preferred alternative including a clarification of the location of the HST alignment alternative between San Jose and Gilroy, effect of UPRR denying use of its right-of-way, and effect of avoiding impacts to UPRR freight operations. Although the additional information resulted in some changes to the rationale for selecting the Pacheco Pass Network Alternative serving San Francisco via San Jose, it remained the recommended preferred alternative.

The analysis in this Partially Revised ~~Draft-Final~~ Program EIR provides additional information applicable to all network alternatives, and provides additional information about environmental impacts associated with the Pacheco Pass network alternative. As described below, however, the rationale for recommending the Pacheco Pass Network Alternative serving San Francisco via San Jose as the preferred alternative remains largely the same, although some revisions to the rationale have been made as a result of comments on the Partially Revised Draft Program EIR.

6.2 New and Clarified Information in the Partially 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

6.2.1 Revised Impacts Analysis: Noise & Vibration, Traffic, and Construction

The new information in Chapters 2 -4 results in clarification and revision of noise and vibration, traffic, and construction impacts, as follows:

- The shift of Monterey Highway to the east with implementation of the high-speed train project creates noise and vibration impacts by moving the highway closer to sensitive receptors. The noise and vibration impact from the project overall has been previously described as significant under CEQA for the alignment that includes Monterey Highway. The conclusion remains the same. For clarity, the shift of Monterey Highway has been identified as a separate significant noise impact and mitigation strategies specific to the highway noise impact described.
- The four-track, shared use alignment on the San Francisco Peninsula creates noise and vibration impacts from both operation of the high-speed train and also from the potential movement of UPRR freight trains to the outside tracks of the expanded right of way, closer to adjacent land uses. The potential movement of freight also affects an area South of San Jose between Tamien and Lick. The noise and vibration impact from the project overall has been previously described as significant under CEQA for the alignment between San Francisco and San Jose, and between San Jose and the Central Valley. The conclusions remain the same.

- The narrowing of lanes on Monterey Highway from six lanes to four lanes for approximately 3.3 miles with implementation of the high-speed train project results in significant traffic impacts on Monterey Highway itself, as well as on surrounding roadways.
- The loss of traffic lanes parallel to the Caltrain right-of-way in certain areas along the San Francisco Peninsula results in significant traffic impacts on affected roadway segments and nearby intersections. Loss of traffic lanes parallel to the UPRR right-of-way in the City of Hayward would result in a significant traffic impact for the Oakland to San Jose Corridor.
- The adjustments to Monterey Highway as part of the high-speed train project will result in noise and vibration impacts and other construction-period impacts that are considered significant under CEQA, consistent with the prior discussion of construction-period impacts as significant in the 2008 Final Program EIR.
- Construction impacts associated with constructing the high-speed train project within an active passenger and freight rail corridor are clarified and identified as part of the significant construction impacts.

These clarified and additional impacts along the Monterey Highway and in certain portions of the San Francisco Peninsula are important considerations in the recommendation of the preferred alternative and have been carefully considered in reevaluating the preferred alternative recommendation. The Monterey Highway impacts would occur only for the Pacheco Pass network alternatives. The San Francisco to San Jose impacts would occur most prominently for the Pacheco Pass network alternatives that utilize the full length of the Caltrain corridor to reach San Francisco from San Jose and for the one Altamont Pass network alternative that would also utilize the full length of the Caltrain corridor to reach San Francisco from San Jose. These impacts would occur in a more limited way for the Altamont Pass network alternatives that would utilize the Caltrain corridor north of Dumbarton. Traffic impacts in Hayward occur only for the Altamont Pass network alternatives. In the judgment of staff, however, the clarified and new impacts discussed in this document do not detract from the recommendation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as preferred.

The potential for noise and vibration, traffic, and construction impacts associated with Monterey Highway movement are unique to the Pacheco Pass network alternatives. The Monterey Highway impacts result from the opportunity in this area to not just follow an existing transportation corridor, but to actually utilize existing transportation right of way to implement the high-speed train project. As the former US 101, Monterey Highway has been designed to carry more traffic than it currently supports. In areas closer to the City of San Jose, Monterey Highway has large shoulders and medians that provide physical space for redesigning the highway to reduce it from six lanes to four lanes within the existing transportation right of way and to use that remaining transportation right of way for the high-speed train alignment. For areas to the south where the highway would shift up to 60 feet, the new right of way would result in the displacement of adjacent land uses, however, to a lesser degree than if an entirely new transportation right of way had to be established. This plan is consistent with the City of San Jose's plans for the Monterey Highway, and it provides an opportunity to upgrade the condition of the roadway corridor throughout.

The potential for noise and vibration and traffic impacts on the Caltrain Corridor between San Francisco and San Jose associated with expanding the existing rail right of way in certain areas, as well as the construction impacts associated with building the high-speed train within an active passenger and freight rail corridor, are not unique to the Pacheco Pass network alternatives, but are most prominent for the Pacheco Pass network alternative that would utilize the entirety of the Caltrain Corridor to reach San Francisco and the one Altamont Pass Alternative that would utilize the entire Caltrain Corridor. The Altamont Pass network alternatives that utilize the Caltrain Corridor north of Dumbarton would have these impacts, but to a lesser degree. The Caltrain Corridor provides an opportunity to implement the high-speed train project with relatively less displacement of private homes and businesses. While the

existing rail right of way would need to be expanded in some areas, the expansion could be accomplished in part by utilizing parallel streets to reduce residential and business displacement.

A multitude of factors influenced the prior designation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as preferred alternative in the 2008 Final Program EIR and the 2010 Revised 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 in this document. The environmental trade-off for reducing the relative amount of residential and business displacement to implement the high-speed train by using existing transportation corridors (Monterey Highway and Caltrain Corridor) results in noise and vibration, traffic and construction effects. On balance, these environmental impacts, while carefully considered and important, do not change 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.

6.2.2 New Information and Changed Conditions

The information in Chapter 5, particularly regarding the Draft 2012 Business Plan and Final 2012 Business Plan, identifies changes in the environmental analysis from the 2008 Final Program and 2010 Revised Final Program EIR based on the recognition that the high-speed train project will be implemented in phases, and that this phasing will result in the project taking longer to complete than previously understood. This information identifies that the benefits from an operational, fully constructed statewide high-speed train system will accrue more slowly. Phasing also means that impacts from constructing the end-point sections will not occur for a longer period of time. In addition, unique impacts would occur at interim northern terminus stations with a phased approach. These impacts, including the potential for higher traffic congestion and impacts on connecting commuter rail systems, are newly identified significant impacts. These differences, however, do not distinguish between the Altamont and Pacheco network alternatives. Phasing can be accomplished for both network alternatives.

The blended system concept in the Draft 2012 Business Plan and Revised 2012 Business Plan is an approach to implementing of a second-tier project for the San Francisco to San Jose Corridor that is highly conceptual at this time. Based on the conceptual level of definition, the blended system approach concept does not appear to distinguish among network alternatives. A blended concept could be accomplished for both Pacheco and Altamont network alternatives that utilize some or all of the San Francisco to San Jose Corridor.

6.3 Rationale for the Recommendation of the Preferred Alternative

6.3.1 Introduction

This section describes the basis for the Pacheco Pass Network Alternative Serving San Francisco via San Jose being identified as the preferred alternative.

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, 2010 Revised Program EIR, and current 2012 Partially Revised Draft-Final Program EIR focused on analysis of HST Alignment Alternatives, which are track alignment alternatives between particular points. 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 and Chapter 6 of the 2010 Revised Final Program EIR summarize and compare 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 preferred alignment alternatives and the overall preferred network alternative, the Authority 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 6-1 below).

**Table 6-1
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

Objective	Criteria
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.

6.3.2 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 ~~three~~ two distinct stages to date. 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 2010 Revised Draft Program EIR between March and April 2010, providing a new opportunity for public comment on the new document. The Authority made a prior decision based on the Revised Final Program EIR in September 2010. The Authority circulated the 2012 Partially Revised Draft Program EIR in January and February 2010. The following summarizes these three ~~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 controversial. The 2008 Program EIR/EIS process received a considerable amount of comment from agencies (federal, state, regional, and local), organizations, and the general public. In 2008, there was a 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, 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, 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, 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, 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 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, 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 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 were substantially more complex. Support remained 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.

Comments on the Preferred Alternative in the 2012 Partially Revised Program EIR Process

The Authority received a number of comments on the 2012 Partially Revised Draft Program EIR from agencies (state, regional, and local), tribes, businesses/organizations, and the general public during the public comment period. The comments were contained in more than 50 comment letters containing more than 400 individual comments. Since 2010, the Draft 2012 Business Plan was released and many comments received related to the blended system concept (see below) and phased implementation rather than specific network alternatives. The comments as a whole included far fewer preferences for a particular alternative than in the past. A number of comments strongly expressed preference for no HST project rather than for a specific network alternative.

The following provides a general summary of the comments that can be reviewed in full as part of this Partially Revised Final Program EIR:

- A. Pacheco:** In 2012, 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; and City of Morgan Hill. A few 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 February in San Jose.
- B. Altamont:** In 2012, the following entities identified in writing their support for one of the Altamont Pass network alternatives: Town of Atherton; Transportation Solutions Defense and Education Fund (TRANSDEF); California Rail Foundation; and Planning and Conservation League.
- C. **Blended System:** Prior to the circulation of the Partially Revised Draft Program EIR, in April of 2011, a proposal for implementing the HST on the Caltrain corridor was circulated by Senator Simitian, Congresswoman Eshoo, and Assemblyman Gordon, calling for a blended system on the Peninsula that integrates HST with an improved Caltrain system. The blended system proposal identified the following points:
- "We explicitly reject the notion of high-speed rail running from San Jose to San Francisco on an elevated structure or "viaduct"; and we call on the High-Speed Rail Authority to eliminate further consideration of an aerial option;
 - We fully expect that high-speed rail running from San Jose to San Francisco can and should remain within the existing Caltrain right of way; and,

- Third and finally, consistent with a project of this more limited scope, the Authority should abandon its preparation of an EIR (Environmental Impact Report) for a phased project of larger dimensions over a 25 year timeframe. Continuing to plan for a project of this scope in the face of limited funding and growing community resistance is a fool's errand; and is particularly ill-advised when predicated on ridership projections that are less than credible.” (Eshoo, Simitian, and Gordon Joint Statement on High-Speed Rail (April 2011).)

The following entities expressed a preference for a blended system approach on the Peninsula, or discussed the blended system without a preference: City of Palo Alto; Peninsula Corridor Joint Powers Board; City of San Mateo; City of Menlo Park; Town of Atherton; Transportation Solutions Defense and Education Fund. In addition, a number of individuals expressed support for a blended system approach. Many of these submissions also indicated a specific opposition to a four-track alignment on the Peninsula.

6.3.3 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 and illustrated in Chapter 7 of 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 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 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 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 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 the 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 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 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 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. In 2012, the public input focused as much on preferences for "no project" and "no HST" as on specific network alternatives. As in 2010, several Peninsula cities expressed strong opposition to a Pacheco Pass alternative that would use a Caltrain alignment.

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 2000 Business Plan. 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). While solutions to these seismic issues have been identified for the separate Altamont Corridor Rail Project, these solutions involve a substantially slower commuter/intercity rail service that does not meet the design requirements for a high-speed train network alternative. 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.

Phasing Opportunities and Potential Blended System: The high-speed train project could have effective phased construction for either Pacheco Pass or Altamont Pass network alternatives. The "Bay to Basin" phase discussed in the Revised 2012 Business Plan could be accomplished for a Pacheco Pass alternative to a temporary San Jose terminus or an Altamont Pass alternative to a temporary Union City terminus. It is therefore the conclusion of this analysis that the need to phase construction of the high-speed train system does not differentiate between the Pacheco Pass and Altamont Pass network alternatives. Similarly, based on the very general level of information developed to date on the blended system concept, the blended system would appear to be effective for either Pacheco Pass or Altamont Pass network alternatives that would utilize the Caltrain Corridor in whole or in part.

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. 219-318 ac) 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.

6.3.4 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).

6.3.5 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 6-1)

The Pacheco Pass Network Alternative serving San Francisco via San Jose 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 was 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 Northern and Southern California.

Operational benefits result in potential for 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 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, and avoiding splits along the high-speed trunk of the system connecting the most populated regions of the state, Southern California and San Francisco and San Jose, 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~~

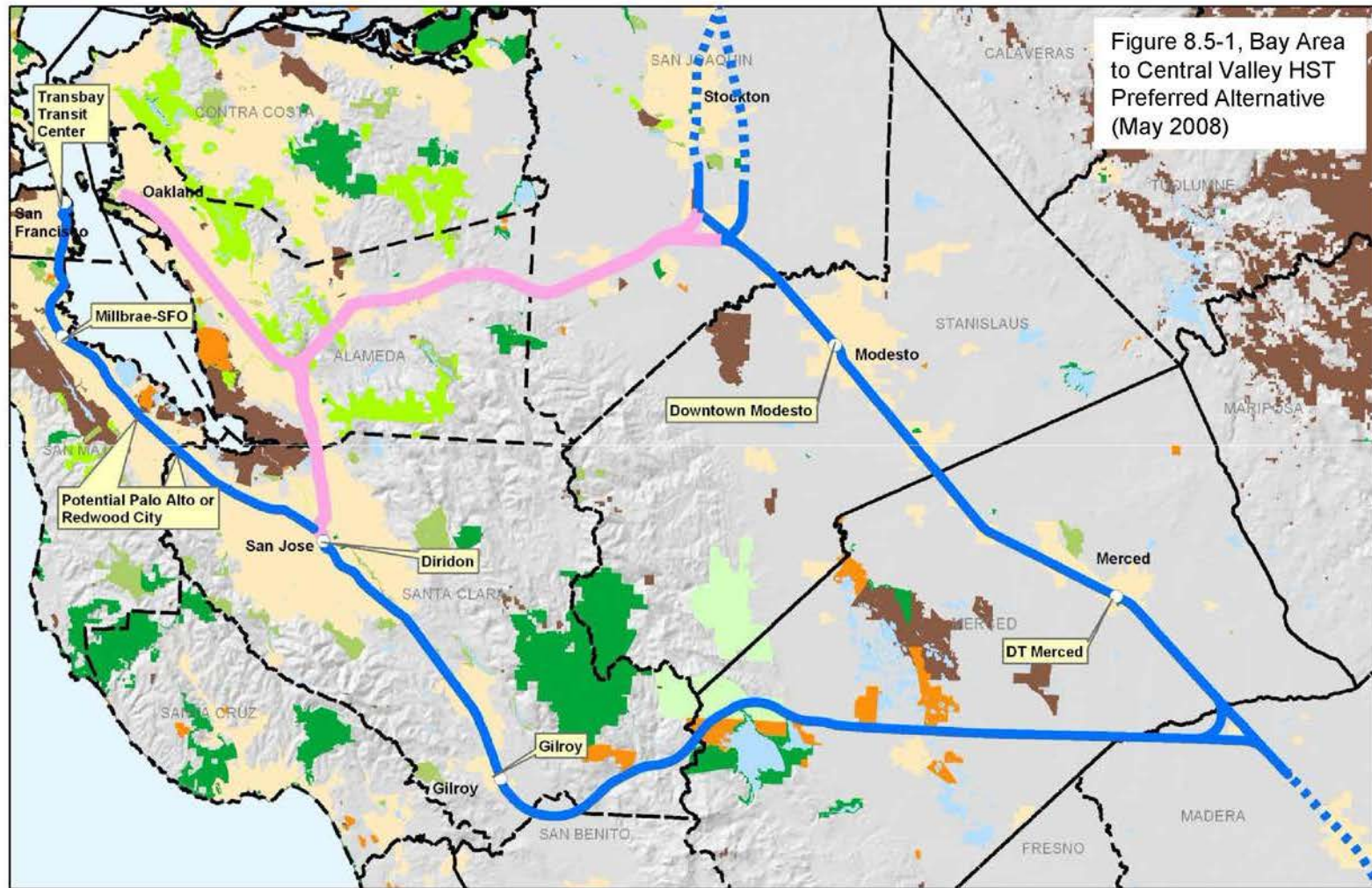
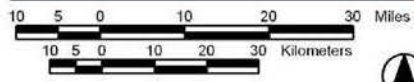


Figure 8.5-1, Bay Area to Central Valley HST Preferred Alternative (May 2008)



- 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 6-1
Bay Area to Central Valley HST Preferred Alternative
Bay Area to Central Valley HST Partially Revised Final Program EIR

~~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), and while these issues may be possible to resolve for a slower, improved commuter/intercity service, they are still present for high-speed train alternatives. 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. While the preferred Pacheco Pass Network Alternative would also have construction issues and logistical constraints, particularly on the Caltrain Corridor, these issues are comparatively less than through the Tri-Valley and Alameda County because of the existing, publicly owned commuter rail right-of-way.~~

3. The Pacheco Pass best utilizes an existing, publicly owned rail corridor with potential for track sharing the Caltrain corridor.

The Pacheco Pass alternative would enable the early, incremental implementation of the entire Caltrain Corridor section of the HST system between San Francisco and San Jose, and south of San Jose to Lick. 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 full extent of the Caltrain corridor both north of San Jose as well as south of San Jose to Lick without a new Bay crossing, 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 help reduce the need for state funds.

4. The Pacheco Pass is still supported by the Bay Area region.

Many of the Bay Area local and regional governments, transportation agencies, and business organizations strongly support the Pacheco Pass network alternative to San Francisco via San Jose and the Caltrain Corridor. As described above, there has been a change in public input from 2007/2008 through 2010 and in 2012. There is considerable city and community concern for implementation of HST along the San Francisco Peninsula overall. However, there is strong 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. This support is critical towards implementing this major infrastructure project through the heavily urbanized Bay Area linking San Francisco, San Jose and Gilroy.

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 remains is a willing partner with the Authority and 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 supports the narrowing of the underutilized Monterey Highway in order to accommodate HST service in this corridor.

6.3.6 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 2008 Final Program EIR, 2010 Revised Final Program EIR, and the current Partially Revised ~~Draft~~ Final Program EIR 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 for Program EIR purposes 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 alternative¹. 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 to 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 offer greater connectivity. The City of Palo Alto sent a letter dated November 9, 2010, to the Authority opposing the consideration of a HST station anywhere in Palo Alto. The City of Redwood City and the Redwood City Chamber of Commerce have previously indicated support for the Redwood

¹ 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.

City station location option. ~~As part of future project-level studies~~ the Authority should continue to investigate ~~both~~ potential sites and working with local agencies and the Caltrain JPB to determine whether a Mid-Peninsula station site should be recommended.

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 Program EIR previously identified a preferred maintenance and storage facility location to support the HST fleet in the study region in the Merced area (Castle AFB). For purposes of this Program EIR, 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 Realtors) 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. In conclusion, for purposes of the Program EIR process, the Merced area remains preferred.

Over the past two years, additional study and consideration of the heavy maintenance facility for the high-speed train system has been explored as part of project-level EIR/EIS documents for the Merced to Fresno and Fresno to Bakersfield sections. The Authority released a Request for Expression of Interest in 2009, which resulted in multiple potential sites for a heavy maintenance facility in the Central Valley being evaluated, including sites outside the study area for the Bay Area to Central Valley. Accordingly, while the Merced area is preferred at the program level, a wide range of alternatives is being examined as part of project-level EIR/EIS documents.

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).

6.3.7 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 need² from the proposed HST system, but that could also accommodate HST service. The Authority is the lead state agency and the FRA 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 via intermodal connections with BART would be a crucial objective for this project.

² As defined in CEQA and NEPA implementing regulations, procedures, and guidelines.

At this time, ~~potential, no proposed~~ alignments for study have been identified for the Altamont Corridor Rail Project, ~~with; however, the~~ corridor limits are between Stockton and San Jose, which are the terminal stations for the current ACE service. ~~The potential~~ 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 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 ~~is working~~ 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, ⁷ 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.

7 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The following text (Table 7-1) replaces that contained in Chapter 9 of the 2008 Final Program EIR in Table 9.3-1 (with regard to noise) and supplements Table 9.3-1 with regard to traffic. This Table 7-1 replaces Table 8-1 in Chapter 8 of the 2010 Final Revised Program EIR (with regard to traffic). Table 7-1 also supplements Table 9.3-1 with regard to connecting commuter rail services.

Table 7-1
Revised Table 9.3-1 and Table 8-1—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.	<p>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, including at San Jose or Union City which could serve as interim terminus stations under phased implementation,</p> <p>Potential lane closures on adjacent parallel streets on the San Francisco Peninsula and in Hayward would have an adverse effect on intersections, circulation, access, and parking on affected streets and nearby intersections. Design solutions possible that may avoid lane closures.</p> <p>Portions of Monterey Highway between Southside Drive and Bailey Road to be narrowed from six to four lanes. Level of service would be adversely affected for segments of Monterey Highway between Southside Drive and Bailey Road. Surrounding roadways are projected to operate under congested traffic conditions during the 2035 peak hours.</p>	<p>Encourage use of transit to stations. Work with transit providers to coordinate services to increase service to stations and otherwise improve station connections. Provide additional parking for an interim period.</p> <p>Loss of Parallel Lanes on San Francisco Peninsula and in Hayward: Improvements to accommodate the diverted traffic, roadway realignment to replace any loss of capacity, create one-way streets to maintain access, physical separation of affected bicycles lanes, restriping of parking spaces, contribute "fair share" for improvements.</p> <p>Monterey Highway: Promote transit use, signal timing and synchronization, and turn lanes.</p>	Potentially significant	Significant and unavoidable

Key Environmental Issues	Alternative		Mitigation Strategy for HST	Potential Significance for HST	
	No Project	HST Network Alternatives		Before Mitigation	After Mitigation
Noise and vibration	More traffic and more air operations from growth in the intercity demand generate more noise.	<p>0 to 20 mi (32.4 km) or 0% to 9% of network alternative length would have high impacts on noise-sensitive land use/populations. Noise increase attributable to HST frequencies. Noise reduction from existing conditions due to elimination of horn and crossing gate noise resulting from grade separation of existing grade crossings. 0 to 52 mi (84.3 km) or 0% to 25% of network alternative length would have high impacts related to vibration.</p> <p>(Range based on HST Network Alternatives. See Chapter 7 of 2008 Final Program EIR).</p> <p>The narrowing of Monterey Highway may result in beneficial noise effects, but the shifting of the lanes and right-of-way may result in adverse noise effects.</p> <p>The potential for moving freight rail activity to outside tracks along the San Francisco Peninsula and between Tamien and Lick south of San Jose may result in adverse noise and vibration effects.</p>	<p>Consider noise barriers along noise-sensitive corridors for HST and Monterey Highway; track treatment for vibration. Replace property walls where existing property walls removed for Monterey Highway.</p> <p>Consider building sound insulation or related treatments for individual properties including in areas along Monterey Highway and San Francisco Peninsula.</p> <p>Consider acquisition of property to serve as a noise buffer.</p> <p>Develop traffic management measures, including vehicle speed limits and vehicle type limitations, for Monterey Highway. Upon relinquishment of Monterey Highway as a state highway, work with the City of San Jose to establish appropriate traffic management measures to reduce Monterey Highway traffic noise.</p>	<p>Noise: Potentially significant</p> <p>Vibration: Potentially significant</p>	<p>Noise: Potentially less than significant</p> <p>Vibration: Significant and unavoidable</p>
Connecting commuter rail services	Capacity on existing commuter rail services (Caltrain, BART) may be	Connecting commuter rail service would experience an adverse effect from HST riders boarding at interim terminus stations (San Jose or Union City) under phased implementation.	Adding more train cars (i.e. seats) to existing Caltrain/BART train consists. Provide additional and more frequent service for Caltrain to and from San Jose or for BART to and from Union City. Provide a dedicated train service that would specifically serve the HST customers	Potentially significant	Significant and unavoidable

Key Environmental Issues	Alternative		Mitigation Strategy for HST	Potential Significance for HST	
	No Project	HST Network Alternatives		Before Mitigation	After Mitigation
	insufficient to accommodate projected demand.		between San Francisco and San Jose. Work with transportation providers to enhance connectivity to commuter rail stations. Provide commuter station improvements.		
Construction	Planned transportation infrastructure improvements would occur.	Construction would have an adverse effect on traffic congestion both on Monterey Highway and also other places where lane narrowing or adjustments are made, as well as on surrounding local streets during the construction period including lane closures and lane narrowing, and detours. Other potential impacts associated with construction include air quality, noise and vibration, energy, aesthetics/land use, hazardous materials and waste, cultural resources, geology and soils, water quality, biological resources, and Section 4(f) and 6(f) resources.	Off-street parking for construction vehicles, maintain pedestrian and bicycle access, restrict construction hours, establish construction truck routes, protect public roadways during construction, maintain public transit access and routing, prepare a detailed construction transportation plan, limit construction during special events, minimize closure of any proximate transportation facilities during construction, and maintain passenger and freight rail operations within active rail corridors. Applicable mitigation strategies for each impact category as set forth in the impacts analysis in the 2008 Final Program EIR.	Potentially significant	Significant and unavoidable in some resource areas
Grade separation impacts	Planned transportation infrastructure improvements would occur.	Beneficial impacts of grade separation, as required by HST design criteria, include improved traffic circulation, reduced noise from eliminating existing railroad crossing noise, <u>improved vehicular and pedestrian safety</u> and improved community cohesion. Potential adverse impacts include need for real property, displacement of existing land uses, impacts on biological, hydrological, and parks resources, visual effects, the potential for impacts to cultural	Applicable mitigation strategies for each impact category as set forth in the impacts analysis in the 2008 Final Program EIR.	Potentially significant	Significant and unavoidable

Key Environmental Issues	Alternative		Mitigation Strategy for HST	Potential Significance for HST	
	No Project	HST Network Alternatives		Before Mitigation	After Mitigation
		resources or public utilities, potential hazardous materials effects, as well as traffic, air quality, and noise <u>and vibration</u> effects.			

7A ADDITIONAL DESIGN FEATURES AND MITIGATION STRATEGIES

In response to comments on the Partially Revised Draft Program EIR, the Authority is adding the following design features and mitigation strategies to the document.

Hydrology and Water Resources

Project-level design for the HST will adhere to NFIP floodplain management building requirements and the Authority will consult with local agencies as part of second-tier, project-level EIR/EIS analysis.

(in response to FEMA Region IX letter)

Aesthetics and Visual Resources

Design soundwalls for the HST and for the shift of Monterey Highway with aesthetic treatments in visually sensitive environments, including artistic elements, color, landscape screening or signage to enhance the appearance of soundwalls.

(in response to letters from City of Palo Alto and Citizens for California High Speed Rail Accountability)

8 PREPARERS

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8.2 List of Consultants

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10 Introduction to Responses to Comments and Standard Responses to Frequently Raised Comments

10 INTRODUCTION TO RESPONSES TO COMMENTS AND STANDARD RESPONSES TO FREQUENTLY RAISED COMMENTS

This introduction explains the organization of and how to use the Response to Comments, which includes the responses to public comments on the January 2012 Partially Revised Draft Program EIR.

10.1 STANDARD RESPONSES TO FREQUENTLY RAISED COMMENTS

As part of the public review process for the January 2012 Partially Revised Draft Program EIR, the Authority received more than 50 written comment letters/submissions and verbal comments at a public hearing containing more than 400 individual comments. These comments addressed the January 2012 Partially Revised Draft Program EIR, the prior August 2010 Revised Final Program EIR and May 2008 Final Program EIR, the proposed decision on a network alternative for connecting the HST system between the Bay Area and the Central Valley, and numerous other policy issues related to the HST system statewide and in the Bay Area. The first section of this Response to Comments section provides narrative standard responses to address the most frequently raised issues in the written and verbal comments received. The Standard Responses briefly summarize a topic raised frequently in the comment letters and then provide a response that directly addresses the comments, or that supplements the response to an individual comment. The reader can obtain an overview of the most frequently raised comments by reviewing Section 10.4 below.

10.2 INDIVIDUAL RESPONSES TO WRITTEN AND VERBAL COMMENTS

Following the standard responses, the Authority is providing responses to individual written and verbal comments. The individual letters and comments included and addressed are located in the following chapters:

- Federal Agencies – (Chapter 11)
- Tribe – (Chapter 12)
- State Agencies – (Chapter 13)
- Local Agencies – (Chapter 14)
- Businesses/Organizations – (Chapter 15)
- Individuals – (Chapter 16)
- Public Meeting – (Chapter 17)

Each written submission and oral presentation can be found under the appropriate category, by name, or if representing an organization, the name of their organization. If a commenter gave oral or written testimony at the public meeting, they will find their comments, submissions, and responses under “Public Meeting.” Each written comment letter sent to the California High-Speed Rail Authority (Authority) was assigned a numeric identifier. For example the U.S. Department of Homeland Security, FEMA letter is found in Chapter 11, “Federal Agencies,” and its comment letter has been designated as 15. Each comment letter and the public hearing transcript have brackets in the margin with unique

identification numbers for each comment. Some letters or oral statements have been treated as a single comment, whereas in others multiple comments have been identified, numbered and responded to individually. The responses to comment(s) are located at the end of each letter or transcript. Each response is labeled with the letter/testimony identifier and comment number (such as 15-1) that relates back to that particular bracketed comment.

Some comments from the same agency, organization, or individual were submitted more than once (e.g., letter was first faxed and then mailed). These duplicate comment letters are not included.

10.3 RESPONSES TO WRITTEN AND VERBAL COMMENTS ON THE AUGUST 2010 BAY AREA TO CENTRAL VALLEY HST REVISED FINAL PROGRAM EIR AND MAY 2008 BAY AREA TO CENTRAL VALLEY HST FINAL PROGRAM EIR/EIS

The Authority has recirculated portions of its 2010 Revised Final Program EIR to address the *Atherton* November 2011 court rulings, described in Chapter 1, and requested that members of the public limit their comments to the revised and recirculated materials. (CEQA Guidelines, § 150885(f)(2).) The CEQA Guidelines indicate that a lead agency need only respond to those comments received during the recirculation period that relate to the portions of the EIR that were revised and recirculated. The Authority received a very large number of comments directed to 2012 Draft Business Plan and portions of the Program EIR that had not been revised and recirculated. In some instances, identical or nearly identical comments were addressed previously in Volume 2 of the August 2010 Revised Final Program EIR, which responded to 3,700 individual comments contained in more than 500 comment letters received on the March 2010 Revised Draft Program EIR. In these current responses to comments, the Authority has provided a response to all significant environmental issues raised in comments on the Partially Revised Draft Program EIR, as well as comments on the 2010 Revised Final Program EIR and the 2008 Final Program EIR and on the project generally. The responses address comments that go well beyond the Partially Revised Draft Program EIR in the interest of increasing public information about the proposed HST system and increasing communication with those submitting comments and potentially affected communities along the proposed alignments for the HST system.

A. IMPORTANT CONSIDERATIONS IN REVIEWING THE RESPONSES TO COMMENTS

The reader should keep in mind several considerations in reviewing the responses to comments. Many responses refer to the 2010 Revised Final Program EIR and the 2008 Final EIR to provide information about previous mitigation commitments made in 2008 and 2010 by the Authority, although subsequently rescinded (2008 decisions) or planned for rescission as of the time of preparation of this document (2010 decisions). This is often the case since some comments pertained to the August 2010 Revised Final Program EIR and/or the May 2008 Final Program EIR, rather than to the Partially Revised Draft Program EIR. These references to the prior Final Program EIRs should not be construed as indicating a prejudgment of the outcome of this process. Certainly, consideration of mitigation commitments will depend upon the HST network alternative that may be ultimately selected by the Authority for further study. However the 2010 decision documents provide information concerning the types and extent of mitigation that it is expected the Authority would likely consider when it is asked to consider whether to certify the Partially Revised Final Program EIR and whether to adopt CEQA findings and other decision documents. In addition, some responses refer to study and analysis activities to be undertaken in project-level review of environmental impacts related to

the HST system. Such references are not to be construed as prejudging the outcome of this environmental process. Further project-level studies will depend on the outcome of this process and will reflect any new decisions the Authority makes concerning the Final Program EIR for the Bay Area to Central Valley portion of the HST system.

10.4 RESPONSES TO WRITTEN AND VERBAL COMMENTS ON THE JANUARY 2012 BAY AREA TO CENTRAL VALLEY HST PARTIALLY REVISED FINAL PROGRAM EIR

As part of the public review process from January 6, 2012, to February 21, 2012, for the January 2012 Partially Revised Draft Program EIR, the Authority received over 50 comment letters containing more than 400 individual comments. Some comments addressed the 2012 Partially Revised Draft Program EIR; however, some addressed the August 2010 Revised Final Program EIR and the May 2008 Final Program EIR and other Authority documents such as the Authority's 2012 Business Plan. Many comments offered opinions about the proposed project generally. The following standard responses address the most frequently raised comments. Responses referring to other documents such as the 2010 Revised Final Program EIR, the 2008 Final Program EIR, or other reviews, such as project-level environmental studies, are intended to provide information and are not to be construed as prejudging the outcome of this process.

The following standard responses are intended to provide general responses to the most frequently raised comments. Topics include:

- Standard Response 1 The Blended System Approach
- Standard Response 2 California High-Speed Rail Authority Procedures and Process
- Standard Response 3 Level of Detail for Impacts Analysis and Mitigation

As noted, some responses refer to the 2010 Revised Final Program EIR and/or the 2008 Final Program EIR. These two documents are part of the overall 2012 Partially Revised Final Program EIR and are being made available as one set of documents. Some responses refer to prior standard responses in the 2010 document. These are being included as Chapter 18 of this document.

STANDARD RESPONSE 1**The Blended System Approach**

The Authority received numerous comments related to the "blended system" approach for the San Francisco Peninsula that was described in the Draft 2012 Business Plan, released by the Authority in November 2011. Some of these comments indicated confusion about the relationship between the Business Plan, the Partially Revised Draft Program EIR, and the first-tier project.

Several comments suggested the Partially Revised Program EIR is inadequate and requires revision and recirculation because the first-tier project has changed based on information in the Draft 2012 Business Plan, including information on project phasing and the potential for a blended, 2-track alignment along the San Francisco to San Jose Corridor.

Several comments suggested that the Authority should remove from study the four-track, shared use alignment for San Francisco to San Jose.

Other comments suggested that the blended system concept should be treated as a separate alternative for full study in the program EIR.

Numerous comments endorsed a blended system approach for the San Francisco to San Jose second-tier project.

The Authority's 2012 Business Plan is an Implementation Strategy for the Statewide High-Speed Train Project (HST)

Chapter 5 of the Partially Revised Draft Program EIR discussed the Authority's Draft 2012 Business Plan, which was released in November 2011. The purpose of the Draft Business Plan is to comply with the requirements of Public Utilities Code section 185033, which requires the Authority to develop a plan with the content specified in the statute, and offer it for public review and comment. This content addresses, among other issues:

- the type of service the authority anticipates it will develop, such as local, express, commuter, regional, or interregional;
- a description of the primary benefits the system will provide;
- a forecast of the anticipated patronage, operating and maintenance costs, and capital costs for the system;
- an estimate and description of the total anticipated federal, state, local, and other funds the authority intends to access to fund the construction and operation of the system;
- and the proposed chronology for the construction of the eligible corridors of the statewide HST system; and
- all reasonably foreseeable risks the project may encounter, such as risks associated with the project's finances, patronage, right-of-way acquisition, environmental clearances, construction, equipment, and technology, and the authority's strategies, processes, or other actions it intends to utilize to manage those risks.

In early April, the Authority released a Revised 2012 Business Plan, which it will consider adopting at an upcoming publicly noticed meeting of the Authority Board. (California High-Speed Rail Authority, Draft Revised 2012 Business Plan (April 2012).)

The Business Plan is not a CEQA "project" in and of itself. Rather, the Business Plan is a planning document with an implementation strategy for the timing and funding of the second-tier HST projects that comprise the statewide HST system, the overall project or endeavor that the Authority has been evaluating under CEQA using a tiered environmental review approach. The implementation strategy in the Business Plan describes a phased approach for construction of the statewide HST system, consistent with how HST projects are built around the world and how other major infrastructure in California has been developed, including the California State Water

Project and State highway system. It depicts the general routes of the statewide system as selected at the first-tier of CEQA compliance (2005, 2008, 2010), acknowledges the litigation over the Bay Area to Central Valley route and that it is subject to change, and then indicates the order of priority for construction of each second-tier project, which will be accompanied by its own, separate, second-tier EIR/EIS.

The Business Plan is a dynamic, living document. By statute, the Authority must adopt an updated business plan every two years.

The 2012 Business Plan Phasing Strategy Does Not Change the Statewide High-Speed Train System.

The Draft 2012 Business Plan, including its discussion of phasing, does not change the statewide HST system. The Revised 2012 Business Plan does not change the statewide HST system either. The Authority is planning for an HST system that reflects the design characteristics in the 2005 Statewide Program EIR, the current 2012 Bay Area to Central Valley Partially Revised Final Program EIR, and its governing statutes. (Pub. Utilities Code, §§ 185012(c), 185030; Sts & Hwy Code, § 2704.09; 2005 Final Program EIR, pp. 2-27 & 2-28; 2008 Final Program EIR, p. 2-8.) Consistent with its statutory mission, the Authority has continued to plan for the long-term implementation of the entire 800+ mile statewide HST system, but with a phasing plan that would prioritize implementation of Phase 1 between San Francisco and Los Angeles and Anaheim. (Phasing Report [May 2007]; 2008 Final Program EIR, pp. 2-18 to 2-19.)

The Draft 2012 Business Plan described in more detail how Phase 1 of the HST system would unfold, starting with implementation of the second-tier HST projects in the Central Valley [Merced to Fresno and Fresno to Bakersfield] and then building incrementally toward the San Francisco Bay [Merced to San Jose, San Jose to San Francisco] and the Los Angeles Basin [Bakersfield to Palmdale, Palmdale to Los Angeles]. In other words, the Draft Business Plan described an order and process for how the seven second-tier HST projects that comprise Phase 1 will be implemented, with construction occurring first in the middle of the HST system, and last at the end points.

The Revised 2012 Business Plan refines the implementation strategy significantly, to deliver earlier transportation benefits at a lower cost. The first component of implementation continues to be starting construction in the Central Valley to create the spine of the HST system, based on second-tier EIRs for the Merced to Fresno and Fresno to Bakersfield second-tier HST projects. Rather than building out from the center, however, and reaching the urban areas of the Los Angeles Basin and the San Francisco Bay last, the Revised 2012 Business Plan prioritizes these urbanized end sections, called the “bookends” of the HST system, for incremental improvements at the same time that construction in the Central Valley is underway. Construction from the Central Valley will proceed south from Bakersfield to the San Fernando Valley to form an initial operating section (IOS), then expand to the north to reach the Bay with a “Bay to Basin” system that can then blend with existing commuter rail.

The Business Plan’s more detailed discussion of phased implementation for the second-tier projects recognizes current budgetary and funding realities, which will result in both Phase 1 and Phase 2 of the statewide HST system being constructed over a longer period of time than originally anticipated. The HST project as a whole, however, remains the same. The train technology, the train speeds, and design characteristics of the infrastructure continue to be as set forth in the 2005 Statewide Program EIR, the current Bay Area to Central Valley Partially Revised Final Program EIR, and the Authority’s governing laws.

The 2012 Business Plan Phasing Strategy Does Not Change the Authority’s First-Tier Planning Project to Select a Preferred HST Alignment from the Central Valley to the Bay Area.

Just as the Business Plan does not change the HST system as a whole, it does not change the Authority’s first-tier planning project being studied in this Partially Revised Final Program EIR. The Authority is proposing a first-tier, general planning project to select a preferred HST alignment to connect the Bay Area and Central Valley, along with preferred station locations. The planning approval at hand involves the fundamental choice of a preferred alignment

within the broad corridor between and including the Altamont Pass and the Pacheco Pass for the HST segment connecting the San Francisco Bay Area to the Central Valley. (2008 Final Program EIR, p. 1-2, p. 2-5; 2010 Revised Final Program EIR, p. 1-6 to 1-7; Partially Revised Final Program EIR, p. 1-3 to 1-4.) Once selected, the preferred alignment would be developed into one or more second-tier projects, to be studied in detail in one or more second-tier EIRs. (2008 Final Program EIR, p. 1-2; Resolution 10-12; Resolution 11-11.)

As a first-tier planning project, the selection of the HST alignment into the Bay Area is necessarily a general endeavor lacking many site-specific details. The first-tier project makes the fundamental choice by selecting a broad alignment and general station locations, but does not go further to select specific alignment footprints, vertical track profiles, or station footprints. The first-tier project also does not select or in any way commit the Authority to any particular operational details or service patterns, because operational decisions are not part of the first-tier project. The Partially Revised Final Program EIR therefore examines the impacts of the alignment alternatives and station location options at a commensurately broad and general level of detail sufficient to support the overall choice of the preferred route, and also looks at a conservative, worst-case. Approval of the first-tier project will not authorize any construction or implementation of the HST project in the Bay Area to Central Valley study area. Rather, a decision on the first-tier project establishes the general route for the HST system from the Central Valley to the Bay Area, which must be defined in far greater detail as a second-tier project, and studied in greater detail in a second-tier EIR/EIS.

Chapter 5 of the Partially Revised Draft Program EIR considered at a programmatic level of detail the environmental implications of the phasing approach discussed in the Draft 2012 Business Plan, which describes the planned implementation order and process for the second-tier projects. That analysis described the potential for differences in impacts with a phased approach that would result in a temporary northern terminus for either a Pacheco Pass or Altamont Pass network alternative, as compared with a non-phased approach.

The phasing of the second-tier projects does not change the first-tier project, however, it simply changes the anticipated timing and construction phasing in which the second-tier projects will be implemented.

The 2012 Business Plan Discussion of a Blended System for the San Francisco to San Jose Section Does Not Change the First-Tier Planning Project, But Represents Details About How a San Francisco to San Jose HST Second-Tier Project Could Be Implemented

The discussion of a blended system approach for the San Francisco to San Jose second-tier project in the Draft 2012 Business Plan and Revised 2012 Business Plan likewise does not change the Authority's first-tier planning project to choose the preferred alignment from the Central Valley into the Bay Area and preferred station locations. As indicated in Chapter 5 of this document, the blended system approach is an additional increment of phased implementation for a second-tier HST project between San Francisco and San Jose. The blended approach would provide initially for blended *systems* prior to construction of any alignment on the Caltrain Corridor between San Francisco and San Jose. (Draft 2012 Business Plan, pp. 2-1 and 2-2.) The blended systems would allow for an HST passenger to arrive at a temporary northern terminus in San Jose and transfer to a connecting Caltrain train, allowing for the type of interconnectivity anticipated in Proposition 1A, even before funding may become available for construction in the San Francisco to San Jose section for HST specific infrastructure (such as a HST station at Millbrae). As funding becomes available, incremental improvements to the Caltrain corridor may provide for HSTs to continue on from San Jose to San Francisco, allowing for passengers to reach San Francisco without changing trains, providing for blended operations.

The Authority is not proposing and will not approve a blended system approach as part of its decisions on the first-tier project. It is therefore not necessary for the Authority to change its first-tier project to incorporate the blended system approach into its decision-making as part of the first-tier project selecting a broad alignment and general station locations. The first-tier project is focused on

selecting the general alignment location for the HST, not specific operations. The Partially Revised Final Program EIR discussion of a full four track section for the San Francisco to San Jose section with a generous operational plan fulfills the function of a first-tier EIR by analyzing the maximum impacts of construction and operation in this section. This information, along with the additional first-tier discussion of the blended system approach below, is sufficient for the Board to intelligently consider the environmental consequences of the first-tier project.

The details about a blended system approach to implementation for this section of the HST system would be part of the description of the second-tier project for San Francisco to San Jose, which is appropriately addressed through a second-tier EIR. These details include, for example, train operation simulations to identify how HST might interface with Caltrain commuter rail for a period of time on the existing track infrastructure, what grade separation enhancements would be implemented, and where passing tracks would be planned. This level of detail can appropriately be developed as part of the planning for the second-tier project, when the complexities of the project are more fully described and ready for detailed analysis. (Peninsula Corridor Joint Powers Board, Caltrain/California HSR Blended Operations Analysis (March 2012); Peninsula Corridor Joint Powers Board, Caltrain/High-Speed Rail Blended System Planning Process (March 2012).)

This approach is consistent with CEQA and the statute's recognition that EIRs should be prepared at the earliest possible time, so that environmental considerations can influence the project, but that very early environmental analysis may not have all details available. Where a lead agency is proposing a complex or phased project, it can utilize tiering "to postpone to later planning stage the evaluation of those project details that are not reasonably foreseeable when the agency first approves the project." (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 139; see also Pub. Resources Code, § 21093.) The details of the blended system approach to implementation in a particular place are precisely the types of second-tier project details that belong in a second-tier EIR.

The Environmental Implications of a Sample Blended System/Operations Approach Can Be Described Generally At the First Tier.

Although the blended system/operations approach is an aspect of the second-tier project for whatever northern "bookend" of the HST system the Authority selects, there are several broad points about environmental impacts that can be identified about a generic blended system as it relates to the first-tier decision on an alignment from the Central Valley into the Bay Area. This information was included in the Partially Revised Draft Program EIR and is expanded upon in this Partially Revised Final Program EIR in light of CEQA's tiering requirements to adequately analyze the environmental implications of the planning approval at hand, but at a level of detail commensurate with the planning proposal. (CEQA Guidelines, § 15152.)

As explained in Chapter 5 of the Partially Revised Draft Program EIR:

For the highly urbanized sections between San Francisco and San Jose, San Fernando Valley and Los Angeles, as well as Los Angeles to Anaheim, a concept called a "blended system approach" is also described in the Draft 2012 Business Plan. The blended system would provide an additional phasing option for the urbanized sections that have existing commuter rail corridors, which would allow for integrating HST service into an existing commuter rail system with certain, limited upgrades, in advance of construction of the currently planned shared or dedicated HST facilities. For example, a passenger traveling from Los Angeles could potentially travel on dedicated, fully constructed HST facilities to a particular station, such as San Jose, and then continue with a "one-seat ride" that would have the HST complete its journey to San Francisco on an upgraded and electrified commuter rail line at slower speeds. The blended system concept has the potential to provide earlier travel benefits by

allowing some level of HST service to reach San Francisco, Los Angeles, and Anaheim with a smaller investment than would be required for the fully constructed HST facilities. This approach is highly conceptual at this time. (Partially Revised Draft Program EIR, p. 5-4.)

Chapter 5 then went on to explain how the blended system approach would result in differences in environmental impacts from that described in the earlier Program EIRs from 2008 and 2010:

The blended system discussed in the Draft 2012 Business Plan would provide for a HST to reach its end-point destination by traveling a portion of the trip on upgraded commuter rail lines. This approach is highly conceptual at this time. The blended system is an additional potential method of phasing that could have differences in environmental impact from those discussed above. In general, if a blended system approach were to be implemented along the Caltrain Corridor between San Jose and San Francisco, it would delay the environmental impacts associated with expanding the right-of-way for a four-track, shared alignment. For example, local land use and property adverse impacts would be delayed. The benefits of grade separations that would occur with the full HST project, including the traffic circulation and noise reduction benefits, would also be delayed.

This discussion is consistent with the 2008 Final Program EIR discussion of shared track operations, which it identified as a possibility for second-tier projects.

The proposed HST system selected in the statewide program EIR/EIS (California High-Speed Rail Authority and Federal Railroad Administration 2005) and further analyzed in this Program EIR/EIS is electrified steel-wheel-on-steel-rail dedicated

service, with a maximum speed of 220 mph (350 kph). A fully grade-separated, access-controlled right-of-way would be constructed, except where the system would be able to share tracks at lower speeds with other compatible passenger rail services. Shared track operations would use existing rail infrastructure in areas where construction of new separate HST facilities would not be feasible. Although shared service would reduce the flexibility and capacity of HST service because of the need to coordinate schedules, it would also result in fewer environmental impacts and a lower construction cost. (2008 Final Program EIR, p. 2-2.)

Using the alignment between San Francisco and San Jose for further illustration, and based on additional examination and evaluation of the blended system approach for the Revised 2012 Business Plan, a blended system approach could be primarily two tracks, rather than the four track system described in the Program EIR [except where four tracks currently exist], and could potentially run two to four trains per hour during the peak period per direction and one to two trains per hour per direction during the off peak period, in contrast the conceptual full build train frequency of ten trains per hour per direction during the peak period and six trains per hour per direction during the off peak period. A blended system would involve electrification, advanced signal systems, and infrastructure upgrade such as key grade separations, but would not be fully grade separated as described in the Program EIR. (Revised 2012 Business Plan, p. 2-22.)

Considering this sample blended system scenario, the environmental impact differences from the four-track alignment can be described as follows:

- fewer traffic, air quality, noise & vibration, energy, aesthetic, water quality, property, hazardous materials/wastes, cultural, and biological resources impacts from construction due to the lesser amount of civil construction involved than for the full four-track alignment. Rather than expanding the existing right-of-

way, the right-of-way would remain predominantly the same width and construction would occur mainly in this already disturbed, active rail corridor.

- fewer localized traffic impacts at stations, elimination of adverse traffic effects from potential lane loss along Peninsula streets, less noise and vibration from operating trains, elimination of potential impact of moving freight trains incrementally closer to existing residences and businesses, less operational energy used, and fewer aesthetics impacts from operations due to the comparatively fewer high-speed trains per hour and per day. The fewer high-speed trains per hour would result in a great reduction in impacts from operations.
- Lower project benefits in the areas of vehicle miles travelled reduction, air quality benefits and GHG emissions reductions, and less total energy savings relative to other transportation energy needs due to fewer high-speed trains per hour in operation. The benefits of eliminating all at-grade crossings, and therefore eliminating the noise associated with train horns and crossing gates, would also be reduced.

In the areas of safety and localized traffic, the implications of a blended system approach are very speculative until a more refined proposal is put forward. The safety impacts of introducing additional trains onto the Caltrain corridor may result in some safety improvements relative to the existing condition if the blended system approach includes key grade separations. Without full grade separation, as proposed and evaluated in the Program EIR as part of the four-track system, the safety implications will depend on currently unknown factors, such as the number and location of key grade separations, and the type of safety enhancements at remaining at-grade crossings, if any. In general, the lack of complete grade separation would appear to result in reduced safety benefits as compared to the four-track, fully grade separated alignment.

Local traffic effects of introducing additional trains onto the Caltrain corridor with a blended system approach are also highly speculative. In general, the grade separation proposed as part of the four-track

alignment analyzed in the Program EIR provides traffic circulation benefits by eliminating the congestion of traffic having to stop for passing commuter trains. This local traffic benefit would be eliminated in those areas that do not have grade separation as part of blended system. The local traffic effects of potential lane reductions adjacent to a four-track alignment would also be eliminated, or largely eliminated with a blended system, because the blended system would operate predominantly within the existing right-of-way. The one area of potential, adverse local traffic impact is in the area of localized congestion from additional trains, resulting in additional periods of traffic being stopped at the at-grade crossings.

The Implications of the Blended System Approach For the Alternatives Can Be Described Generally At the First-Tier.

Although a detailed, blended system proposal is not yet available, and must await further second-tier planning and environmental review, it is possible to discuss generally how the blended system concept affects the ability of the different network alternatives to meet the project objectives.

At the outset, the Business Plan describes a blended system approach for San Francisco to San Jose. The alignment between San Francisco and San Jose would provide for an effective blended system for either a Pacheco Pass network or an Altamont Pass network alternative. The way these network alternatives would implement a blended system would be slightly different if comparing the Pacheco Pass network alternative serving San Francisco via San Jose and the Altamont Pass network alternative serving San Francisco and San Jose. This is the case because the Altamont alternative would cross the Bay at Dumbarton, and some trains would go north to San Francisco and other south to San Jose, whereas for the Pacheco alternative all trains would travel north to San Jose and on to San Francisco. Either way, a blended system could be implemented for any network alternative involving the Caltrain corridor between San Francisco and San Jose, in whole or in part. Several such alternatives for Altamont Pass were included in the 2008 Final Program EIR.

Chapter 6 of the Partially Revised Draft Program explained that for those network alternatives that would involve a branch of the HST line (Pacheco Pass serving San Jose, San Francisco, and Oakland; Altamont Pass serving San Jose, San Francisco, and Oakland; Altamont pass serving San Jose and San Francisco with a Bay crossing at Dumbarton), service would be split among the endpoint cities. This characteristic made these alternatives somewhat less desirable than the preferred Pacheco Pass network alternative serving San Francisco via San Jose. This is the case because the preferred alternative can service two major Bay Area cities in a single line, thereby providing the same frequency of service to both cities. With a blended system, however, the HST would have less frequency as a product of relying on a more modest level of infrastructure. Assuming a blended system concept for San Francisco to San Jose, the branch for the Altamont Pass network alternative that would cross the Bay at Dumbarton would have less of a frequency disadvantage while the blended system was in place, because the number of HST trains per hour is already constrained.

Chapter 6 of the Partially Revised Final Program EIR reflects that the blended system would work for both an Altamont and a Pacheco network alternative that uses some or the entire Caltrain corridor between San Francisco and San Jose.

Continued First-Tier Evaluation of the Full, Four-Track Alignment in the Caltrain Corridor in the Revised Program EIR is Consistent With CEQA and Does Not Preclude a Focus on a Blended System Approach as Part of the Second-Tier Project.

The Authority has not redefined its tier 1 project. The Partially Revised Draft Program EIR, all notices, and the Partially Revised Final Program EIR consistently describe the first-tier project as selection of a preferred network alternative and station location options for connecting the HST system between the Bay Area and Central Valley. Maintaining the evaluation of the four-track alignment for San Francisco to San Jose in the Program EIR is consistent with CEQA, because an EIR must evaluate the "whole of an action." Moreover, CEQA requires that all phases of a project,

from planning to implementation to operation, must be considered in an EIR. Reasonably foreseeable future phases of a project must be examined.

In the context of the first-tier, planning project examined in this Program EIR, analysis of the full, four track alignment represents early examination of the environmental consequences of the HST project in this corridor, which fulfills the purpose of a program or first-tier EIR. (*Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370-71.) In addition, examination of the full four-track alignment provides the broadest possible assessment of impacts at the first-tier level, by examining what may be a worst-case in terms of physical impacts (real property acquisition, displacement of homes and businesses, traffic, air quality, noise & vibration, and other environmental impacts). The blended system, however it is eventually defined, is part of the second-tier HST project for whatever section may be selected as the northern "bookend" for the HST system, and will be the subject of its own, more detailed second-tier EIR.

Moreover, the Authority's approval of the first-tier project would not constrain its ability to define, propose, and examine a blended system approach as part of a second tier EIR. A lead agency has the flexibility and discretion to examine phasing options like a blended system approach at the second-tier, and can exercise its discretion to define precisely what such an approach might be, as long as the environmental consequences of those choices are analyzed in a second-tier EIR prior to any decisions being made at the second-tier. The general decision on the location for an alignment into the Bay Area based on the Program EIR does not lock the Authority in to a particular operational approach, preclude a blended system approach to implementation, or commit the Authority to adopt one set of design options over another.

If the Authority certifies this Partially Revised Final Program EIR, and makes a new first-tier decision of an alignment for the HST into the Bay Area, it can then evaluate whether and how to incorporate a blended system approach into the northern "bookend" of the HST system, whether that be a Pacheco Pass alignment or an Altamont

Pass alignment. The outcome of the revised Program EIR process, and the new programmatic decision, will influence the level and shape of activity for the San Francisco to San Jose section, or other northern bookend section, and how a blended system might be designed.

The Authority suspended its work on a second-tier EIR/EIS for the San Francisco to San Jose section in May 2011. The Authority intends to complete the Program EIR process before deciding whether to re-start the second-tier EIR/EIS work for the San Francisco to San Jose section.

The Blended System Approach to Implementation for San Francisco to San Jose In the Draft 2012 Business Plan and Revised 2012 Business Plan Does Not Require Further Examination of Alternatives.

The blended system approach for a second-tier project does not require further examination of the current alternatives, or additional alternatives, in the first-tier, Program EIR. A first-tier EIR can properly tailor its alternatives to the first-tier project, rather than future, second-tier projects. (*Al Larson Boat Shop v. Board of Harbor Commissioners* (1993) 18 Cal.App.4th 729, 744.) Moreover, the blended system approach could be utilized for any of the network alternatives considered in the Program EIR that would include an alignment along the Caltrain Corridor between San Francisco and San Jose, either in whole or in part. Blending high-speed trains on existing infrastructure is possible in this area because it contains an existing two track and in some areas four track commuter rail line. Other alignments in the study area are not amenable to a blended approach because they do not include rail lines that would be compatible with HST trains (e.g. BART lines) or they involve highly congested freight rail lines with operators that have already expressed an unwillingness to share their right-of-way.

While it may be theoretically possible to create a potential HST network alternative by combining attributes of the slower speed, regionally focused Altamont Corridor Rail Project with a blended system from San Jose to San Francisco, this approach has a number

of significant disadvantages that result in it not being a reasonable alternative for consideration in the Program EIR. This approach would be similar, but not identical to, the Altamont Pass network alternative that reaches San Francisco without a Bay crossing (refer to Figure 7.2-9 in chapter 7 of the 2008 Final Program EIR). This network alternative would have approximately 217 route miles to reach San Francisco (calculated based on Figure 7.2-9, minus mileage to Oakland).

One disadvantage of this hypothetical approach, for example, is that it would result in around 40-50 more route miles to reach San Francisco than the preferred Pacheco Pass network alternative serving San Francisco via San Jose (Refer to Pacheco Pass Network Alternative with San Francisco and San Jose Termini [Figure 7.2-12 in 2008 Final program EIR]. This calculation is based on the Pacheco Base Case minus the route miles from the Wye to Stockton, or approximately 170 total route miles.

This hypothetical approach would result in nearly 25 more route miles to reach San Francisco than the Altamont Pass network alternatives studied in the Program EIR that would serve San Francisco with a Bay crossing at Dumbarton. (Refer to Altamont Pass Network Alternative: San Francisco Terminus [Figure 7.2-5 in 2008 Final Program EIR]; Altamont Pass Network Alternative: San Francisco and San Jose Termini [Figure 7.2-1 in 2008 Final Program EIR]; Altamont Pass Network Alternative, San Francisco and San Jose via San Francisco Peninsula [Figure 7.2-8 in 2008 Final Program EIR].) Each of these network alternatives have approximately 192 route miles in length to reach San Francisco.

A second major disadvantage is that the alignment of the entire route for an Altamont Corridor Rail Project plus San Francisco/San Jose would restrict travel to substantially slower speeds from the Central Valley to the outskirts of the Bay Area than all network alternatives studied in the Program EIR, due to the design characteristics specific to the Altamont Corridor Rail Project. To illustrate, the Altamont Pass network alternative that reaches San Francisco without a Bay crossing (Figure 7.2-9 in chapter 7 of the

2008 Final Program EIR) would have a travel time between San Francisco and Los Angeles of 3 hours and 17 minutes. The Altamont Corridor Rail Project plus a blended San Francisco/San Jose would be substantially slower due to the greater route mileage and relatively slower train speeds. Even considering that a blended system between San Francisco and San Jose at the second tier may involve somewhat slower speeds than the 125 mph anticipated in the Program EIR for that roughly 50 mile alignment, and potentially longer travel times depending on the design at the second tier, the Altamont Corridor Rail Project alignment is sufficiently inferior in terms of route length and travel times, that it does not merit consideration as a first-tier alternative in combination with a San Francisco to San Jose blended component. (Parsons Brinckerhoff, Technical Memorandum on Alternatives Suggested in Comments on Partially Revised Draft Program EIR, April 2012.)

The Program EIR process has considered a reasonable range of alternatives for the first-tier project that has been upheld on two

occasions in litigation by the Superior Court. The range of alternatives examined in the Program EIR has included a total of twenty-one network alternatives to connect the Bay Area and Central Valley (eleven for the Altamont Pass, six for the Pacheco Pass, and four for Pacheco Pass plus Altamont Pass (local service). Numerous other alternatives were preliminary considered and eliminated from detailed study, as discussed at length in the prior Program EIR documents. Additional alternative suggestions from commenters have been, and continue to be, carefully considered. (See Standard Response 10, Alternatives, in the 2010 Revised Final Program EIR.) The Business Plan information about phasing and implementation of a blended system at the second-tier does not undermine the range of alternatives. The range of alternatives continues to be reasonable and compliant with CEQA.

STANDARD RESPONSE 2**California High-Speed Rail Authority Procedures and Process**

The Authority received multiple comments on the timing of the issuance of the Partially Revised Draft Program EIR on January 6, 2012, relative to formal action by the Authority Board to rescind its decisions certifying the 2010 Revised Final Program EIR and approving the Pacheco Pass Network Alternative.

A few comments suggested rescission of the Board's 2010 decisions must precede circulation of a Program EIR responding to the Court's November, 2011 rulings, and that the Partially Revised Draft Program EIR was thus "premature".

Several comments suggested that aspects of the Authority's process, including its tiered planning approach, demonstrate that the Authority has pre-determined the outcome of the Program EIR process before it is complete.

Other comments reflect confusion over whether issuance of an EIR is an agency staff decision, or the decision of an agency's decision-making body.

Although rulings were issued by the Sacramento Superior Court on November 10, 2011 in *Atherton 1* (Case No. 34-2008-8000022) and *Atherton 2* (Case No. 34-2010-8000679), service of final court papers on the Authority is required before the Authority is specifically obligated to comply with what the court has ordered. (Cal. Civil Procedure Code, §§ 1096, 1097.) Those final papers were signed by the Court on February 1, 2011, and then served on the Authority on February 13, 2012. Specifically, the Authority was served with an Order Denying Motion for Discharge of Writ of Mandate and Ordering Issuance of Supplemental Writ of Mandate, and a Supplemental Writ of Mandate in *Atherton 1*, and was served with a Final Judgment Granting in Part and Denying in Part Petitioners' Verified Petition and a Peremptory Writ of Mandate in *Atherton 2* (collectively, the "Final Papers").

The Court's direction to the Authority to rescind and set aside Authority Resolution No. 11-11 certifying the 2010 Revised Final

Program EIR and approving of the Pacheco Pass Network Alternative took effect when the Final Papers were served on the Authority on February 13, 2012. After the Authority was under instruction from the Court to act, the Authority timely agendaized a closed session item on the pending litigation for its next regularly scheduled Board meeting, on March 1, 2012. The March 1, 2012 meeting was the Authority's first opportunity to convene in closed session and be advised by counsel following issuance of the Final Papers. The Authority has agendaized as an action item on this topic for the next meeting following its March 1 meeting, which was originally scheduled for April 5, 2012, and then moved to April 12, 2012. Specifically, at its April 12, 2012 meeting, the Board will consider a resolution rescinding and setting aside Resolution No. 11-11. CEQA's procedures for correcting an EIR following a court judgment/order do not include specifications that a lead agency wait until a final notice of entry of judgment/order is served before proceeding with CEQA compliance.

The purpose of the Partially Revised Program EIR is to provide the necessary analysis to support the selection of a network alternative to connect the Bay Area and Central Valley, via the Altamont Pass, via the Pacheco Pass, or via both passes. Authority staff responded to the November, 2011 rulings identifying specific topics requiring further work by the Authority by immediately undertaking further analysis to correct the deficiencies identified by the Court, a process that resulted in the Partially Revised Draft Program EIR. Where a lead agency wants to comply with CEQA and correct an EIR, nothing requires it to wait before doing so.

Moreover, issuing the Partially Revised Draft Program EIR for public comment was an action within the Authority staff's discretion. CEQA Guidelines section 15050, subdivision (c) provides that determination of whether to prepare an EIR is an independent process and may be initiated by staff; by contrast, subdivision (b) provides that

consideration of the EIR prior to acting upon or approving the project is reserved for the agency's decision-making body.

The Partially Revised Draft Program EIR explained that the Authority is required to rescind its 2010 Revised Final Program EIR certification and rescind its approval of the Pacheco Pass Network Alternative (by means of rescinding Resolution No. 11-11), and make a new decision based on a corrected Program EIR. Further, Chapter 1.4 discussed the process that was anticipated to unfold: specifically, that the Board would act to rescind its 2010 decisions "at a future publicly noticed meeting, once final court papers for the Town of Atherton rulings are in place." (Partially Revised Draft Program EIR, p. 1-3.) The Authority committed in Chapter 1.4 to determining whether to make the following new decisions after it rescinded its prior decisions:

- Certify the Partially Revised Final Program EIR for compliance with CEQA
- Approve findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program in compliance with CEQA
- Approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs.

At the March 1, 2012 Board meeting, in a presentation updating the Board on the status of the Partially Revised Program EIR, the Authority took due care to describe that rescission of its 2010 decisions, and consideration of a new decision for 2012, were anticipated to be agendized for action at upcoming Board meetings.

The Authority will not consider making a new first-tier decision in a vacuum. The Authority is required to make its new first-tier decision for the Bay Area to Central Valley portion of the high-speed train system, based on fair consideration of all of the information in the 2008 Final Program EIR, the 2010 Revised Final Program EIR, the 2012 Partially Revised Program Draft and Final EIRs, and the entire record before it. The Authority Board's prior actions, including

certification of both the 2010 Revised Final Program EIR selecting the Pacheco Pass Network Alternative and the 2008 Final Program EIR also selecting the Pacheco Pass Network Alternative, are among the many factors relevant to the Board's decision. Factors that may have been important to prior Boards in making their decisions, including as summarized in Chapter 6 of the Partially Revised Draft Program EIR, may or may not be important to the current Authority Board, and new factors not previously considered may also be important to this Board. In other words, while the Board will take a fresh look at the fundamental decision of Altamont versus Pacheco, its decision will not be based upon a blank slate.

Contrary to the suggestion of some commenters, the simple fact that Resolution No. 11-11 remains "on the books" does not mean that the Board pre-committed to making the same decision that a prior Board made in 2010 to approve a Pacheco Pass Network Alternative. As described above, the Board will take a fresh look at the fundamental decision that must be made through the Program EIR process: whether to connect the Bay Area to the Central Valley via the Altamont Pass, the Pacheco Pass, or both. The actions taken thus far by the Authority, and the action anticipated to be taken by the Board of considering whether to certify the Partially Revised Final Program EIR, are consistent with CEQA's requirement (as articulated in the *Save Tara* line of cases) to complete EIR processes prior to making a final decision.

Save Tara v. City of West Hollywood (2008) 45 Cal.4th 116 requires that environmental review (1) be conducted sufficiently early so as to allow for meaningful evaluation by decision makers, and (2) practically speaking, serve its function of informing and guiding the decision makers. (Id. at 130.) In the context of revised and recirculated environmental documents where decision makers are being asked to make a new decision (whether to approve a particular project) when they have previously approved the same project, greater importance attaches to the latter requirement: at a practical level, decision makers must be truly informed and guided by environmental review specific to the decision at hand, prior to making that particular decision. The risk, of course, as articulated by the Supreme Court in *Laurel Heights I*, is that the project is

effectively approved before environmental review and an EIR becomes “nothing more than [a] post hoc rationalization[] to support action already taken.” (*Laurel Heights Improvement Assn v. Regents of University of California* (1988) 47 Cal.3d 376, 394.)

As the Authority disclosed in the Partially Revised Draft Program EIR, and has disclosed in public meetings since November 2011, certain aspects of the Authority’s second-tier process would need to change if the Authority Board makes a new decision selecting an Altamont Pass Network Alternative. When discussing project-level environmental studies, the Authority has acknowledged the aspects of the Authority’s planning process would have to change if the Board were to make its new decision and select an Altamont alignment instead of a Pacheco alignment. (See December 13 Board Meeting item #4, Board Presentation PowerPoint, page 22.)

The Authority’s 2012 Business Plan is discussed in Standard Response 1. The Authority’s 2012 Business Plan explains that if the Board were to make a different program-level decision than it did in 2010 and 2008, certain aspects of the 2012 Business Plan would need to be revised. (Draft Revised 2012 Business Plan, page 2-35.)

Comments that the Partially Revised Program EIR process has been “rush[ed],” and that the issuance of the Partially Revised Draft Program EIR was “premature” suggest that the Authority has committed to approve the project prior to achieving CEQA compliance. This is not the case. The Authority has been studying the Bay Area to Central Valley connection for more than a decade. The entirety of the Bay Area to Central Valley Program EIR process evidences the Authority’s careful consideration of alternatives and mitigation measures as required by CEQA. In sum, in no way has

the Authority acted as if Pacheco Pass, the network alternative selected in 2008 and again in 2010, is a foregone conclusion of its Program EIR process. Nothing about the Authority’s process has caused it to irreversibly pre-commit to a particular outcome of this Partially Revised Program EIR process, or has prejudiced the Authority’s consideration of project alternatives or mitigation measures. (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116).

STANDARD RESPONSE 3**Level of Detail for Impacts Analysis and Mitigation**

The Authority received fewer comments on the Partially Revised Draft Program EIR than on the 2007 Draft Program EIR or the 2010 Revised Draft Program EIR. Fewer comments raised issues related to the level of detail in the Program EIR impacts analysis and mitigation measures. Because a few comments continued to express dissatisfaction with the Program EIR's level of detail, the prior standard response on level of detail is reproduced and updated here.

Program EIRs and Level of Detail

The timing of EIR preparation involves a balance of competing factors. The CEQA Guidelines recognize that a lead agency should prepare an EIR "as early as feasible" in the planning process so that environmental considerations can influence the project design, "yet late enough to provide meaningful information for environmental assessment." (CEQA Guidelines, § 15004, subd. (b).) Tiering of EIRs allows an agency the discretion to strike an appropriate balance between CEQA's mandate for conducting environmental review as early as feasible and the need to take complex decision making processes one step at a time.

The Authority and its federal partner, the Federal Railroad Administration (FRA), are intentionally using a tiered environmental review process to make decisions about the HST system in California. The HST system consists of logical linear sections in a chain of contemplated actions that would be carried out under the same authorizing statutory and regulatory authority, each section with similar environmental effects that can be mitigated in similar ways or using similar methods applied at specific sites along the system. The 2005 Statewide Program EIR/EIS, the 2008 Program EIR/EIS, the 2010 Revised Program EIR, and the 2012 Partially Revised Program EIR are all part of the first-tier, program-level environmental analysis to support the Authority's consideration of broad policy and program alternatives and program-wide mitigation strategies at an early stage of decision making. For the Bay Area to

Central Valley portion of the HST system, the Authority will consider whether to certify the Partially Revised Final Program EIR, and if it does certify the document, then it will consider making the following decisions:

- Choice of a network alternative to connect the San Francisco Bay Area to the Central Valley, i.e., Pacheco Pass, Altamont Pass, or Pacheco Pass with Altamont Pass (local service);
- Choice of alignment alternatives within the selected network alternative; and
- Choice of station location options.

The programmatic level of detail in the Partially Revised Draft Program EIR, the 2010 Revised Final Program EIR, and the 2008 Final Program EIR/EIS is intended to be commensurate with the programmatic nature of the decisions under consideration. More detailed analysis of site-specific environmental impacts and mitigation measures for a more detailed project (selection of specific HST track placement alternative, selection of specific station locations) will be considered in subsequent project-level EIRs/EISs.

Court Consideration of Level of Detail in Town of Atherton Litigation

The issue of the appropriate level of detail for the Authority's program EIR has been raised twice in the *Town of Atherton* litigation. In 2009, the Superior Court held that the 2008 Final Program EIR was adequately detailed for a program EIR with respect to the analysis of biological resources, noise, visual effects, and impacts on mature and heritage trees. (Ruling on Submitted Matter, pp. 10, 13, 14, 16.) The issue for which the Court held additional detail was required involved the description of the project between San Jose and Gilroy, related land use impacts, Monterey Highway construction, and impacts of UPRR and its freight operations. (*Id.*, pp. 6, 21.) In 2011, the Superior Court held that the Authority had

improperly deferred analysis of noise, vibration, and traffic impacts associated with shifting Monterey Highway south of San Jose, and with freight noise and vibration and traffic impacts from implementing a four track alignment on the Peninsula. The Superior Court further held that the 2010 Revised Final Program EIR was adequately detailed for a program EIR with respect to its project description and its analysis of safety issues pertaining to Monterey Highway and noise and vibration impacts on the Peninsula (exclusive of freight impacts), and held that the Authority appropriately reserved analysis regarding the vertical profile of the high-speed train alignment for the second-tier.

Tiering may be used to provide for a more general level of analysis, but may not be used to defer analysis of the impacts of the planning approval at hand. (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1170.) As required by the 2011 court rulings, this Partially Revised Final Program EIR provides additional analysis to ensure that all impacts of the Authority's fundamental choice for the HST connection between the Bay Area and Central Valley have been identified. The May 2008 Final Program EIR, as revised by the 2010 Revised Final Program EIR and the 2012 Partially Revised Final Program EIR, therefore provides a sufficient level of information for first-tier, programmatic decision making.

Sufficiency of EIR Information for Programmatic Decision and Need for Further Revision and Recirculation

The general level of detail in the Program EIR's impacts analysis and the general nature of the mitigation strategies are appropriate for the broad decisions to be made. The Program EIR, including the 2008 Final Program EIR, the 2010 Revised Final Program EIR, and the 2012 Partially Revised Final Program EIR, identifies the environmental impacts of the Altamont Pass, Pacheco Pass, and Pacheco Pass with Altamont Pass (local service) alternatives for connecting the Bay Area with the Central Valley. The document identifies differences in the types and levels of impact among alternatives, and also reveals differences related to the ability of

each option to meet the project purpose, need, and objectives and to be feasibly implemented. These differences are precisely the type of information that is needed for the decision makers to make the overall choice of a network alternative and station locations. The May 2008 Final Program EIR, Chapter 3, "Affected Environment, Environmental Consequences, and Mitigation Strategies," Section 3.0.1, "Purpose and Content of This Chapter," states:

... The analysis presented in this chapter addresses the general effects of a program of actions that would make up the proposed HST system in the Bay Area to Central Valley study region. This chapter describes the general differences in potential environmental consequences between the No Project and the HST Alignment Alternatives identified in Chapter 2. The analysis also identifies key differences among the potential impacts associated with the various HST Alignment Alternatives and station location options, to support the selection of preferred alignments and station location options in the Bay Area to Central Valley study region.

None of the prior Program EIR documents or the 2012 Partially Revised Program EIR purport to provide a second-tier, or project-level of detail for impacts of each alignment or station location option. The additional analysis in the 2012 Partially Revised Final Program EIR, however, provides for identification of impacts that the Superior Court found was lacking from the prior Program EIR documents. The level of detail remains general, and more detailed analyses will be provided in future project-level environmental documents, but all impacts associated with the fundamental choice of the network alternative connecting the Bay Area and Central Valley are identified.

The general level of detail in a program EIR can be frustrating for those who wish to have much more detail up front at the program level; however, the Authority continues to believe its use of CEQA's tiering provisions, with additional CEQA analysis as required by the Superior Court, is appropriate. The purpose of tiering and program EIRs is to allow a lead agency to focus on decisions that are ripe for

review at the first tier. In this case, that decision includes the selection of an overall network alternative for the HST system to connect the Bay Area to the Central Valley based on the information gathered and assessed at a program-level of detail. While second-tier, project-level information has been and continues to be generated in the program EIR study area, the existence of that information does not convert the Authority's program-level decision into a project-level one. Rather, under CEQA's tiering rules, a detailed analysis of impacts and mitigation based on detailed project design is appropriately deferred to second-tier EIRs, when a much higher level of design detail (15% engineering) will become available allowing for more precise identification of impacts. This project-level information does not trigger another round of revision and recirculation but rather is appropriately addressed in project-level EIRs.

Role of Mitigation Strategies

This Partially Revised Program EIR and the prior Program EIRs identify general mitigation *strategies* that the Authority and the FRA will consider and refine into specific mitigation *measures* in future project-level environmental documents needed to implement the HST system. This approach is consistent with the concept of tiering. Where, as here, a lead agency is analyzing the environmental impacts of a broad decision at a landscape level, it would be premature to develop precise mitigation *measures*, which will need to be tailored to the type of "on the ground" impacts anticipated for constructing or operating specific portions of the HST system.

The mitigation strategies, along with project design practices lay out actions that will be taken to avoid or reduce identified impacts. These strategies were identified to avoid or minimize significant adverse environmental effects. The mitigation strategies identified have been applied to projects throughout the State, country, Europe, and Japan and have been shown to be effective, which is in fact the reason they are included in the Authority's Program EIRs. The adopted strategies will be enforceable and capable of being accomplished in a successful manner within a reasonable period of time.

As part of the approval of the project and certification of the Program EIR, these strategies will be included in a mitigation monitoring and reporting plan (MMRP) to be adopted by the Authority Board. Once adopted, this MMRP will be enforceable under CEQA, committing the Authority to these strategies.

Detailed site-specific mitigation measures can and will be defined during the project-level EIR/EIS phase, following more detailed preliminary engineering and field reviews focused on the alternative selected at the program level. The mitigation strategies will be used to develop appropriate mitigation measures to address site-specific impacts identified at the project level.

For instance, use of noise walls is a mitigation strategy for noise impacts. The appropriate locations, lengths, height, and design of these walls will be defined during the preliminary engineering and project-level environmental review, when detailed field studies are performed. For the program-level review, it is not practical, given the time and costs, to define specific noise wall locations, heights, or design, nor would such information be meaningful since the location of the alignment is likely to shift vertically and horizontally during preliminary engineering and project level environmental review.

This example applies to all of the mitigation strategies in Program EIRs prepared for this project, and is fully consistent with typical project planning and the environmental review requirements.

Mitigation measures are refined as the planning and engineering progress from the conceptual to preliminary to final project design phases. For example, the exact location, length, and materials used for noise walls may change even between preliminary and final design.

As this planning and engineering process progresses, and as project elements are more precisely defined, further review of project impacts occurs to assure that impacts are still being mitigated to the extent feasible and that no new significant impacts are introduced. Environmental laws and implementing requirements prescribe the procedures to be followed should new significant impacts be revealed.

Some comments suggest that this approach amounts to deferral of mitigation. The Program EIR does not defer mitigation but rather provides an extensive list of mitigation strategies that will be further reviewed, refined and applied at the project-level.

This approach is fully consistent with CEQA and NEPA. FRA and the Authority have, as part of the statewide program EIR/EIS process, committed to applying design practices and mitigation strategies in examining subsequent project activities, and intend to make similar commitments at the conclusion of this Partially Revised Program EIR.

11 Response to Comments from Federal Agencies

Submission 15 (Gregor Blackburn, FEMA Region IX, January 17, 2012)

01-17-12AIG:55 REV0

3657

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA 94607-4052



January 12, 2012

John Mason
California High-Speed Authority
770 L Street, Suite 800
Sacramento, California 95814

Dear Mr. Mason:

This is in response to your request for comments on Public Notice, Notice of Availability and Notice of Public Meeting, Bay Area to Central Valley Partially Revised Draft Program Environmental Impact Report, January 2012.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the Counties of Alameda (Community Number 060001), Santa Clara (Community Number 060337), San Mateo (Community Number 060311), Merced (Community Number 060188), Stanislaus (Community Number 060384), Sacramento (Community Number 060262), San Francisco (Community Number 060298), and San Joaquin (Community Number 060299), revised various dates. Please note that the various Cities within the above-referenced Counties in the State of California are participants in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any development must not increase base flood elevation levels. The term development means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials. A hydrologic and hydraulic analysis must be performed prior to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

www.fema.gov

John Mason
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January 12, 2012

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- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtml>.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Fremont floodplain manager can be reached by calling Norm Hughes, City Engineer, at (510) 491-4700. The Gilroy floodplain manager can be reached by calling Wendie Rooney, Community Development Director, at (408) 846-0450. The Livermore floodplain manager can be reached by calling Pamela Lung, Associate Civil Engineer, at (925) 960-4538. The Menlo Park floodplain manager can be reached by calling Virginia KF Parks, Associate Engineer, at (650) 330-6740. The Merced floodplain manager can be reached by calling John M. Bramble, City Manager/City Clerk, at (209) 385-6866. The Modesto floodplain manager can be reached by calling William A. Crew, Chief Building Official, at (209) 577-5232. The Mountain View floodplain manager can be reached by calling Ron Metzers, CRS Coordinator, at (650) 903-6306. The Oakland floodplain manager can be reached by calling Ray Derania, Deputy Director, Building Services, at (510) 238-4780. The Palo Alto floodplain manager can be reached by calling Glenn Roberts, City Engineer, at (650) 329-2325. The Pleasanton floodplain manager can be reached by calling Jayasree Santhosh, Assistant Engineer II, at (925) 931-5662. The Sacramento floodplain manager can be reached by calling Dave Brent, Engineering Manager, at (916) 808-1423. The San Francisco City and County floodplain manager can be reached by calling Linda Yeung, Deputy City Administrator, at (415) 554-7124. The San Jose floodplain manager can be reached by calling Maria Angeles, Floodplain Manager, at (408) 535-3555. The Stockton floodplain manager can be reached by calling Michael N. Niblock, Community Development Director, at (209) 937-8444. The Tracy floodplain manager can be reached by calling Kevin Jorgensen, Chief Building Official, at (209) 831-6415. The Alameda County floodplain manager can be reached by calling Hank Ackerman, Department of Public Works, at (510) 670-5553.

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Submission 15 (Gregor Blackburn, FEMA Region IX, January 17, 2012) - Continued

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The *Santa Clara County* floodplain manager can be reached by calling Scott Johnson, Representative, Planning and Development, at (408) 299-5706. The *San Mateo County* floodplain manager can be reached by calling Kelly Moran, Chairperson, Board of Supervisors, at (650) 363-4161. The *Merced County* floodplain manager can be reached by calling Kellie L. Jacobs, Floodplain Administrator, at (209) 385-7602. The *Stanislaus County* floodplain manager can be reached by calling Steve Treat, Chief Building Official, at (209) 525-7592. The *Sacramento County* floodplain manager can be reached by calling George Booth, Senior Civil Engineer, at (916) 874-6484. The *San Joaquin County* floodplain manager can be reached by calling John Maguire, Head of Engineering Services, at (209) 953-7617.

If you have any questions or concerns, please do not hesitate to call Cynthia McKenzie, Senior NFIP Planner of the Mitigation staff at (510) 627-7190.

Sincerely,



Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:

- Norm Hughes, City Engineer, City of Fremont
- Wendie Rooney, Community Development Director, City of Gilroy
- Pamela Lung, Associate Civil Engineer, City of Livermore
- Virginia KF Parks, Associate Engineer, Department of Public Works, City of Menlo Park
- John M. Bramble, City Manager/City Clerk, City of Merced
- William A. Crew, Chief, Building Official, City of Modesto
- Ron Metsers, CRS Coordinator, City of Mountain View
- Ray Derania, Deputy Director of Building Services, City of Oakland
- Glenn Roberts, City Engineer, City of Palo Alto
- Jayasree Santhosh, Assistant Engineer II, City of Pleasanton
- Dave Brent, Engineering Manager, City of Sacramento
- Linda Yeung, Deputy City Administrator, City and County of San Francisco
- Maria Angeles, Floodplain Manager, City of San Jose
- Michael N. Niblock, Community Development Director, City of Stockton
- Kevin Jorgensen, Chief Building Official, City of Tracy
- Hank Ackerman, Department of Public Works/Engineering and Construction, Alameda County
- Scott Johnson, Representative, Planning and Development, Santa Clara County
- Kelly Moran, Chairperson, Board of Supervisors, San Mateo County
- Kellie L. Jacobs, Floodplain Administrator, Merced County
- Steve Treat, Chief Building Official, Stanislaus County
- George Booth, Senior Civil Engineer, Sacramento County
- John Maguire, Head of Engineering Services, San Joaquin County
- Ray Lee, WREA, State of California, Department of Water Resources, North Central Region Office
- Ed Perez, WREA, State of California, Department of Water Resources South Central Region Office
- Sarah Owen, NFIP Planner, CFM, DHS/FEMA Region IX
- Jane Hopkins, NFIP Planner, DHS/FEMA Region IX
- Cynthia McKenzie, Senior NFIP Planner, DHS/FEMA Region IX
- Gregor Blackburn, CFM, Branch Chief, Floodplain Management and Insurance Branch, DHS/FEMA Region IX
- Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

Response to Submission 15 (Gregor Blackburn, FEMA Region IX, January 27, 2012)

15-18

The 2008 Final Program EIR addresses hydrology and water resources, including impacts on floodplains, at a program level. Refer to Chapter 3.14 of the 2008 Final Program EIR for a discussion of program-level hydrology and water resources impacts. Detailed project-level design will adhere to NFIP floodplain management building requirements, and potential impacts will be evaluated in each project-level EIR/EIS using the latest FEMA Flood Insurance Rate Maps (and revisions). Local agencies will be consulted as part of each project-level EIR/EIS.

12 Response to Comments from Tribes

Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012)



AMAH MUTSUN TRIBAL BAND
78 SUNSHINE DRIVE
P.O. BOX 5272
GALT, CA. 95632

February 21, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
Attn: Bay Area to Central Valley HST Partially Revised Draft Program EIR

Re: The Bay Area to Central Valley High-Speed Train **DRAFT Program Environmental Impact Report of January 2012 (Revised Draft)**

60-423

The Amah Mutsun Tribal Band, the indigenous peoples of Santa Cruz, south-Santa Clara, and northern Monterey and San Benito counties, have lived throughout the Gilroy area for the last 10,000 to 14,000 years. Because the Amah Mutsun have lived in, occupied and cared for the lands and waters around Gilroy for thousands of years, our burial areas are scattered throughout the region. As a result, construction projects often disinter Amah Mutsun remains. This is a major violation of the tribe's religious beliefs, which hold that a person's spirit comes back to earth when he or she is disinterred and will wander forever unless the body is reburied. The tribe works diligently to ensure that our ancestors are reburied after they are disinterred, and we are known for working collaboratively to minimize or avoid the effects of development on our burial sites.

The Amah Mutsun have a deep, spiritual connection to the lands and waters of our territory. This is inclusive of the Gilroy area, the Soap Lake flood basin of the Upper Pajaro River and south Gilroy, and we believe it is our role to protect the earth, its denizens and natural resources. For our people, all the lands, waters, plants, animals (not only the "listed" ones) hold deep and timeless cultural significance and therefore, are in fact, "cultural resources". Of preeminent concern on this project is the area south and east of Gilroy, which we believe HSR has categorized as agricultural land/or floodplain. This area of the upper Pajaro River is known as the Soap Lake flood basin, much of which was drained for "reclamation" - but still floods under heavy storm events. This area holds great significance for our people, and further desecration of these lands and waters via its physical bisection with a rail line is deeply troubling to us. Generally speaking, the Amah Mutsun are deeply concerned about the many negative effects that high speed rail will have on the natural environment as a whole, the Upper Pajaro/Soap Lake Basin in particular, and on the spirits of our ancestors at rest throughout the area proposed for this project. For all of these reasons, the proposed HSR project alignments through Pacheco Pass portends significant negative impacts to our peoples mental, spiritual and physical well being.

Given the density, depth, and distribution of known cultural resource sites within the alignment of the proposed rail line - or certainly within the hydrologic basins to be affected by the project, we anticipate that the construction of this line will 1) disturb human remains and burial-associated artifacts in a manner that would be difficult or impossible to mitigate; 2) it will negatively affect the hydrologic function of the affected basins, and thereby likely erode or expose cultural resources in areas within and far outside of the proposed alignments.



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60-424

AMTB has attempted to communicate these issues directly to HSRA on numerous occasions in the past 6 years (see attached documentation). However the HSRA has woefully neglected "best practices" with regard to Tribal consultation, we have all but given up on a meaningful, proactive relationship with the HSRA. Their approach, methods, and even staff/consultant attitudes toward Tribal consultation have been so poor, and entirely lacking in transparency and accountability that we have filed a formal complaint with the Federal Highway Administration.

60-425

For these reasons, the Amah Mutsun Tribal Band strongly feels that this Revised Draft EIR/EIS does not adequately consider or mitigate cultural resource impacts and/or tribal concerns over this project. The HSRA has failed to engage in dialog or meaningful consultation with our people on this matter - and as a result, the project is simply unaware of the full breadth of cultural resources at peril should this project go forward.

60-426

The Amah Mutsun Tribal Band remains hopeful and open to meaningful consultation on these matters, though due to the irresponsible and non-responsive stance taken by HSRA staff, executives, and consultants to date, we are also considering avenues of judicial recourse.

Respectfully,

Valentin J. Lopez
Chairman, Amah Mutsun Tribal Band
(916) 743-5833



Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

January 16, 2012

To: Mr. Tim Penney
Tribal Liaison
Federal Highway Administration
61 Forsyth Street, Suite 17T26
Atlanta, GA 30303
tim.penney@dot.gov

From: Valentin Lopez, Chairman
Amah Mutsun Tribal Band

Dear Mr. Penney,

My name is Valentin Lopez and I am the Chairman of the Amah Mutsun Tribal Band (AMTB). The AMTB is the representative Tribal government for much of the Monterey Bay Region, including portions Santa Clara and Monterey Counties, and all of Santa Cruz and San Benito Counties, California.

I submit this letter to you in reference to the Tribal Consultation practices being employed by the High Speed Rail Authority (HSRA) in California. In short, it is the experience and finding of our Tribe that the HSRA has failed to properly execute its duties under Section 106 of the National Historic Preservation Act.

AMTB has attempted to consult with the HSRA starting in 2004, and have been denied the opportunity to conduct meaningful consultation with them on nearly every occasion. I have retained ample documentation of our communications with the HSRA, which I have included attached to this letter, along with summary notes I prepared for a public hearing in Merced on December 13, 2012.

AMTB knows the planning process quite well. We have consulted on scores of projects in our territory ranging from large infrastructure projects to small, local developments. We engage in academic and compliance-based studies in partnership with state, local, and Federal partners, and are known widely in our territory as a professional, accountable, and highly qualified organization. Our experience with the HSRA has been among the worst, in terms of professional and ethical standards, that we have encountered to date.

The HSRA has made a great many critical decisions, including specific alignments and mitigation sites, without conducting legally mandated Tribal consultation. As a result, the proposed HSR alignment cuts through known Sacred Sites and Village sites within our Traditional Tribal Territory. We strongly feel that the HSRA should cease all planning activities until they have fulfilled their requirements for Native American consultation. Furthermore, these consultations must include a complete review of the HSR alignments, placement of HSR stations, placement of heavy maintenance facilities, and an agreement on how cultural resources are defined by this project. Furthermore, our Tribal members request a complete site visit of the proposed alignments property, a review of the qualifications of the archaeology team, and more. All of these activities were proactive steps that the HSR could have and should have implemented prior to making decision impacted by these considerations.



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60-427

Please find attached the aforementioned presentation notes, and a long series of dated communications between the AMTB and the HSRA, which demonstrate thoroughly our frustration with HSRA-style Section 106 consultation.

Please know that the AMTB has not taken a position on the merits of a high speed railway in California. There are certainly good arguments to be made on both sides of the issue. However, without an effective, transparent, and meaningful Tribal consultation process, we join a great number of Tribes in California that must oppose the project due to a flawed and/or absent Tribal consultation.

The Amah Mutsun Tribal Band stands ready to engage in a meaningful consultation process when and if such a process is adopted by the HSRA.



Respectfully,

Valentin J. Lopez
Chairman, Amah Mutsun Tribal Band
(916) 743-5833

Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

Preparatory notes used for December 13th presentation:

Good morning, Mr. Chairman and Members of the High Speed Rail Authority Board. My name is Valentin Lopez and I am the Chairman of the Amah Mutsun Tribal Band. Our Tribe is comprised of the documented descendants of those taken to Missions San Juan Bautista and Santa Cruz. During mission times Mission San Juan Bautista took the indigenous people from over 52 Yokuts tribes to San Juan Bautista. These Indians came from Fresno, Madera, Merced, and Stanislaus Counties. All members of our Tribe have Yokuts blood and it is for our Yokuts ancestors that we speak today.

Specifically, I am here today to express the Amah Mutsun's Tribal Band's frustration and outrage with the California High Speed Rail's total disregard for any type of meaningful or effective consultation as required by law. Over the years we have had contact with the HSR but as of today we have yet to review any maps or discuss our sensitive and sacred sites in the Madera, Merced, Fresno, San Benito and Santa Clara Counties. Specific examples of ineffective consultation includes the following:

Reviame, this paragraph is new as of today: Our Tribe first met with the High Speed Rail in 2004. The meeting was arranged by the Native American Heritage Commission and the meeting took place in a State of California facility in at San Luis Reservoir. The meeting was attended by members of our Tribe, members of the North Valley Yokuts, including Tribal Chairwoman Kathy Perez, Debbie Pillax Treadway of the NAHC and both Deputy Directors of the HSR - including Dep Director Dan Levitt. At this meeting we stated our desires to have tribal consultation on the Merced to Fresno and, if selected by the HSR, the Merced to San Jose routes. We were told we would have Tribal consultation and were never contacted for the purpose of providing cultural resource information.

The Amah Mutsun would like you to know that we testified at three public meeting probably in 2004 and 2005 and we again requested formal consultation with the High Speed Rail Authority on Cultural Resources. Not once did the High Speed Rail contact the Amah Mutsun to discuss initiating the consultation process.

After attending the meeting with the High Speed Rail staff in 2004, I expressed concerns and interests in consulting on this project. On June 7, 2004 I received a letter from Mr. Pinion (Attachment #1). Mr. Pinion said he would put me in contact with Teddy Goodrich, Bob Patrie and Mike Meyer. He said these individuals are familiar with the Coe State Park area and that he believed that there are archaeological sites along the proposed HSR route. Mr. Pinion stated in his email that he did "believe that there are archaeological sites along the proposed HSR route." We never heard from these individuals nor did we meet with them.

At this time I was working in Sacramento as a non uniformed Commander of the California Highway Patrol; I retired in October of 2005. Between the time I received the letter from Mr. Pinion and the time I retired in October 2005, I scheduled a meeting with Mr. Dan Leavitt, Deputy Director of High Speed Rail, and met with him in his office. I told him of our concerns for this High Speed Rail and told him of the importance for consultation. He said he understood and said he would ensure our Tribe was engaged in formal consultation with the High Speed Rail.

Not once was our Tribe contacted by the High Speed Rail for consultation. Instead, we received periodic postcard invitations for us to attend meeting with others from the Native American community.



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60-427

On August 16th, 2010 we had a conference call with Margaret Scantlebury of the HSR and others regarding the Fresno to Merced route. The Amah Mutsun again expressed concerns regarding consultation and Ms. Scantlebury said she would send us some additional information and then we would schedule a meeting. We never received information nor heard from Ms. Scantlebury regarding this phone call commitment again.

Regarding the emails dated September 29, 2010, this email documents that I initiated contact with the HSR to let them know that they had yet to follow-up with sending the Amah Mutsun Tribal Band the information, including maps, that they committed to in our August 29th, 2010 conference call. As a result of this meeting Ms. Scantlebury requested that Charlene Gross, archaeologist, send us the quad maps for the Merced to Fresno Section.

Ms. Charlene Gross sent an email dated November 11, 2010 stating that she sent the information as requested by Ms. Scantlebury in early October and that she would now like to set up a meeting to discuss known cultural resources. I responded with the dates of my availability and never heard back from either Ms. Gross or Ms. Scantlebury regarding this meeting.

The Amah Mutsun invited the HSR to attend our Quarterly Tribal Council Meeting and they agreed to attend. All 10 Council Members attend this meeting and we wanted Council to hear directly from the HSR what was happening and how do we get the consultation process back on track. No one from the HSR showed up to our Council meeting, this was a great insult to all council members.

In January 2010, the Amah Mutsun hosted a meeting at which we would be speaking about the HSR alignment to tribal partners and I invited the HSR to attend this meeting. They said "yes" in mid-November, and then just before the meeting they tried to back out. I pressured Ms. Scantlebury and she, along with three others from the HSR project, showed up with maps that were outdated and didn't show the most current alignment proposals. Ms. Scantlebury laid the map out on the floor and about 40 meeting attendees had to walk down from their seats and look down at the maps. Prior to Ms. Scantlebury leaving I requested that the HSR and the AMTB meet for consultation. She said she was busy but that she would give me a call. I waited for her call until May 2010 at which time I called to learn that she no longer worked for the HSR.

At a HSR meeting in Gilroy in October 2010, the HSR requested that we share sensitive documents and or confidential knowledge. At this meeting there were at least three persons who were not Native American although they claimed they were. I told the HSR representative of this and they still expected me to share sensitive and sacred site information with them. We did not share information at this meeting. Also, at this meeting, the HSR shared sensitive site information the non native attendees over my objection. Furthermore, the non-native persons requested the full reports for all sites listed on the known site location map for the area and HSR agreed to provide it. Finally, the non Native Americans requested to be signatories to the Programmatic Agreement for the HSR and were told they could do so. I left this meeting in total disbelief.

I was prepared to go to the Newspaper over this but then I decided to reach out once again to Mr. Dan Leavitt to see if we could establish a relationship that could lead to meaningful consultation. At the meeting it was agreed that we would work on a negotiated confidentiality agreement first. We expected to sit down with the HSR to discuss things that are important to our Tribe, for example agreeing on defining a cultural resource. Approximate two weeks later the Amah Mutsun received a document,

Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



AMAH MUTSUN TRIBAL BAND
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60-427

which had been reviewed and approved by the California Department of Justice, that presented the laws related to cultural resource protection and that represented the confidentiality agreement that we would be offered. There was no negotiation on this document; it was basically "That's what you get."
Finally, the Amah Mutsun received a letter from Mr. Daniel Harris of the HSR and to our Tribe the letter seemed to suggest that the HSR was taking public comment on the Hybrid Alternative, and then after hearing the public comments the Board of Directors would consider all comments and then vote on the alternative. The email was interpreted as a "disinvite" to the meeting. We were told that a separate meeting would be held with Tribe. Our problem with this is that our comments would be taken after the vote to approve the alternative route had already been taken.

Recent Development: In early January 2012, I received a phone call from a Ms. Sara Allred. She identified herself as a new hire with the HSR and that her Civil Service Classification was, Sr. Environmental Engineer. She said she was taking Ms. Scantlebury's position and that it had been one year since "Meg" left. I found this to be incredible news. Ms. Scantlebury was the only HSR staff person assigned to work with Native American Tribes. When she left there was no Native American Liaison position within the HSR for approximately one year. During this time important final decisions were being made without any consultation with Native American Tribes. Also, most California agencies, such as the Department of Transportation, Department of Parks and Recreation, and the Department of Forestry, all use the "anthropologist" classification for person working with Native American Tribes. The HSRA chose to require this position to have an engineering classification vs. anthropology. The first meeting held by Ms. Allred clearly showed that she did not understand how to work with Native American Tribes. At the meeting it was stated that approximately 96 Tribes were invited to the meeting. The meeting was to discuss the HSR alignment from Fresno to Merced. This geographical territory is represented by one Tribe only, the Chowchilla Tribe. Two other Tribes showed up to this meeting. One Tribal person showed up and said their Tribal interest was from Fresno south to Tulare. The other Tribe to show up was the Amah Mutsun. Our Tribal interest is to support the Chowchilla Tribal on the Fresno to Merced alignments. Once the HSR crosses west of Highway 99, both the Chowchilla Tribe and the Amah Mutsun share responsibility for the HSR alignment, west of Highway 99 to the Pacheco Pass.



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60-427

From: Dennis Pinion <dennis@pinrad.net>
To: VJLTestingCenter <VJLTestingCenter@aol.com>
Cc: Bob Patrie & Toni Hill <rdptwh@cruzio.com>; Teddy Goodrich <tedygoodrich@yahoo.com>; Mike Meyer <bspritzer@earthlink.net>
Subject: RE: High-Speed Rail Route
Date: Mon, Jun 7, 2004 8:42 pm

Val:
Let me put you in contact with Teddy Goodrich, Bob Patrie and Mike Meyer. Teddy is our historian and knows a lot about archeological sites in the area. Both Bob and Mike are familiar with the Park. All of them spend a significant amount of time in the area.
By the way, I believe that there are archeological sites along the proposed HSR route through the wilderness.
Dennis Pinion

From: VJLTestingCenter@aol.com [mailto:VJLTestingCenter@aol.com]
Sent: Monday, June 07, 2004 7:13 PM
To: dennis@pinrad.net
Subject: Re: High-Speed Rail Route

My interest is to tag along next time you give a tour of Coe Park. I grew up in Morgan Hill but never did much at the park and would like a tour at some time. I am the Chairperson of the Amah Mutsun Tribal Band and the southern part of Coe Park is our traditional tribal territory. Our Tribe is comprised of the descendants of Mission San Juan Bautista and Mission Santa Cruz.

Thank you,

Val

Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



AMAH MUTSUN TRIBAL BAND
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60-427

From: Margaret Scantlebury <mscantlebury@hsr.ca.gov>
To: vjltestingcenter <vjltestingcenter@aol.com>; gnoconnor <gnoconnor@gmail.com>
Cc: Reynolds, Alisa (AReynolds@icfi.com) (AReynolds@icfi.com) <AReynolds@icfi.com>; Carter, Aaron (ACarter@icfi.com) (ACarter@icfi.com) <ACarter@icfi.com>
Subject: contact information
Date: Wed, Sep 29, 2010 11:50 am

Hi Valentin:

Thank you for coming to our offices this morning. As promised, here are the contact emails. Alisa Reynolds' phone number is 415-677-7147. My numbers are below.

I sent Charlane Gross, the archaeologist that is providing the quad maps, your mailing address and requested that you receive the maps for the Merced to Fresno section.

I will see you on the 11th.

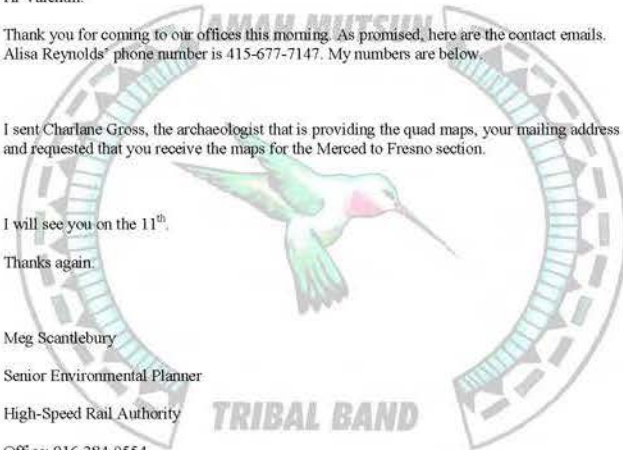
Thanks again.

Meg Scantlebury
Senior Environmental Planner

High-Speed Rail Authority

Office: 916-384-0554

Cell: 916-261-624



AMAH MUTSUN TRIBAL BAND
78 SUNSHINE DRIVE
P.O. BOX 5272
GALT, CA. 95632

60-427

From: Gross, Charlane [mailto:Charlane.Gross@aecom.com]
Sent: Thursday, November 11, 2010 2:25 PM
To: JIM REDMOON; Robert Ledger; Tony Brochini@nps.gov; vlopez@amahmutsun.org
Cc: Margaret Scantlebury
Subject: meeting

Good Afternoon --

I would like to set up a meeting for us plus Jerry Brown (I don't have an email address for him -- do one of you?) to discuss the maps I sent you at the beginning of October. This would be an opportunity for us to discuss the location of Native American sites that were not identified in the background research, but which you know of and think might be in the project footprint. At that time I should also be able to present project mapping for the Klein's Truck Stop area, where Native American burials were uncovered during past construction.

If possible, it would be nice to have this meeting in November; if necessary we can get together in the evening or on a weekend if taking time off of work is difficult for you. If someone wanted to get the conversation started by suggesting some dates, that would be wonderful.

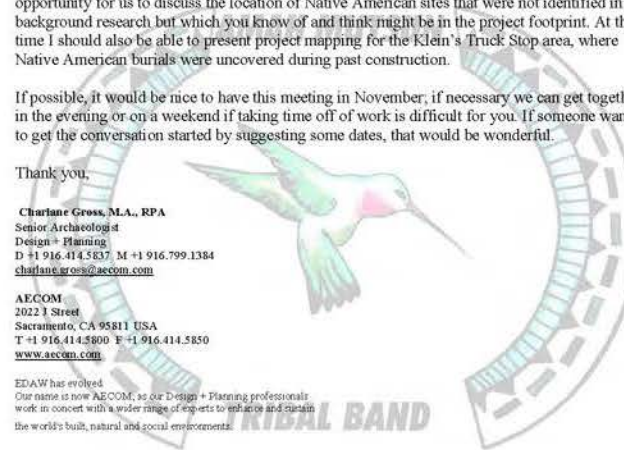
Thank you,

Charlane Gross, M.A., RPA
Senior Archaeologist
Design + Planning
D +1 916.414.5837 M +1 916.799.1384
charlane.gross@aecom.com

AECOM
2022 I Street
Sacramento, CA 95811 USA
T +1 916.414.5800 F +1 916.414.5850
www.aecom.com

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=
This email is also new, it is not part of notes, I found it in my email search this morning. I called Charlane and told her we were prepared to meet at her convenience, she never got back to me. Another failure!



Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

From: vjtestingcenter <vjtestingcenter@aol.com>
To: mscantlebury <mscantlebury@hsr.ca.gov>
Cc: AReynolds <AReynolds@icfi.com>; ACarter <ACarter@icfi.com>; siuw <siuw@pbworld.com>; tdejulio <tdejulio@icfi.com>; david.wemmer <david.wemmer@parsons.com>
Bcc: lisann22 <lisann22@gmail.com>; denise.espinosa57 <denise.espinosa57@yahoo.com>; sippos_acl <sippos_acl@yahoo.com>
Subject: Fwd:
Date: Sun, Nov 21, 2010 9:34 am

Attachments: Pajaro_Invitation_Letter.pdf (185K)

Meg,

I am writing to express the Amah Mutsun's disappointment that neither you nor any member from the High Speed Rail project attended our Quarterly Tribal Council meeting which was held at U.C. Santa Cruz this past Saturday, November 20, 2010. At the High Speed Rail meeting which was held in Gilroy on October 11, 2010, yourself, Alisa and others committed to attending this meeting. The purpose of your attendance would be for the HSR to present the trains path through our traditional tribal territory and to get Councils input regarding the sensitive sites for our Tribe. Approximately 10 days prior to the meeting I spoke with you to confirm you and others would attend this meeting. You said you would be there. I then asked if I should notify others and you said you would handle that. You were notified that we scheduled discussion for the HSR for 1:00 - 1:40. No one from HSR showed up. It's true the weather was bad, three attendees, including myself drove to the meeting from Sacramento.

In addition, I mentioned that I would be forwarding the attached letter to you and letting you know it would be good if you or others could attend this meeting. No one from HSR attended this meeting. We are very disappointed, over 45 professionals attended this meeting, many from state, county, and city entities; other attendees were from conservation groups. This would have been an excellent opportunity for the HSR to learn of our interests.

I am often asked about our Tribes ability to successfully build relationship with different public and private groups. I always say it takes a lot of time to build trust and confidence. At this time we have no confidence that an effective relationship is possible with the HSR. Our next Quarterly Council Meeting is scheduled on February 19, 2011 in Madera, California. Our next Pajaro River Watershed meeting is scheduled for January 8, 2011; location to be determined.

Valentin Lopez, Chairman
Amah Mutsun Tribal Band
(916) 743-5833



AMAH MUTSUN TRIBAL BAND
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60-427

From: Margaret Scantlebury <mscantlebury@hsr.ca.gov>
To: vjtestingcenter <vjtestingcenter@aol.com>
Cc: AReynolds <AReynolds@icfi.com>; ACarter <ACarter@icfi.com>; Wai Siu <siuw@pbworld.com>; tdejulio <tdejulio@icfi.com>; david.wemmer <david.wemmer@parsons.com>
Subject: RE: Amah Mutsun newsletter
Date: Mon, Nov 22, 2010 9:22 am

Hi Val - Thank you for talking with me this morning. I promise this will not get outside of our team. I look forward to seeing you again soon and building the kind of good professional relationship we both want.

Meg,

From: vjtestingcenter@aol.com [mailto:vjtestingcenter@aol.com]
Sent: Sunday, November 21, 2010 9:51 AM
To: Margaret Scantlebury
Cc: AReynolds@icfi.com; ACarter@icfi.com; Wai Siu, tdejulio@icfi.com; david.wemmer@parsons.com
Subject: Fwd: Amah Mutsun newsletter

Meg,

Attached is a copy of our Tribal Newsletter. We seldom share our newsletters with the public, but I am sharing it with you to show some of the important relationship our Tribe has successfully established over the years. Please do not share this newsletter outside the HSR team.

Valentin Lopez, Chairman
Amah Mutsun Tribal Band
(916) 743-5833

This email is new and not referenced in my notes summary. Shows we are still hoping to move forward and meet. She tried to cancel next meeting which was the meeting with the conservation gps at UCSC

Charlene - Thank you for initiating this. Any day but Monday the week following Thanksgiving should be good for me.

Meg

Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

From: Margaret Scantlebury <mscantlebury@hsr.ca.gov>
To: vjtestingcenter <vjtestingcenter@aol.com>
Subject: RE: Saturday meeting
Date: Thu, Jan 6, 2011 12:03 pm

Hi Val - I left a voice message for you. This Saturday is proving difficult for all the people I would like to have attend - an engineer to describe the project plans to date, an archaeologist (Alisa), a biologist since there may be biological mitigation opportunities, and myself. We are in the throws of trying to get the draft environmental documents for Merced to Fresno and Fresno to Bakersfield to the Federal Railroad Administration for approval and have been concentrating on those corridors.

I would like to commit to attending the next meeting, which will be better for all because there will be more design information and I will have the biologist get familiar with the watershed project so that we can see how we might be able to get involved.

My apologies, but, as you know, there are only two of us planners for the entire project, for all environmental studies, and we are on overload.

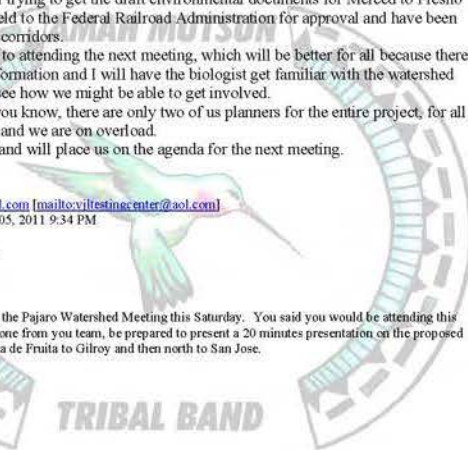
I hope you understand and will place us on the agenda for the next meeting.
Meg

From: vjtestingcenter@aol.com [mailto:vjtestingcenter@aol.com]
Sent: Wednesday, January 05, 2011 9:34 PM
To: Margaret Scantlebury
Subject: Saturday meeting

Hi Meg,

I sent you a letter regarding the Pajaro Watershed Meeting this Saturday. You said you would be attending this meeting. Can you, or someone from your team, be prepared to present a 20 minutes presentation on the proposed route, particularly from Casa de Fruita to Gilroy and then north to San Jose.

Thanks,
Val
916-743-5833
=



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GALT, CA. 95632

60-427

From: Meg Scantlebury <meg_scantlebury@dot.ca.gov>
To: vjtestingcenter <vjtestingcenter@aol.com>
Subject: Re: Amah Mutsu/ val lopez
Date: Fri, May 6, 2011 8:22 am

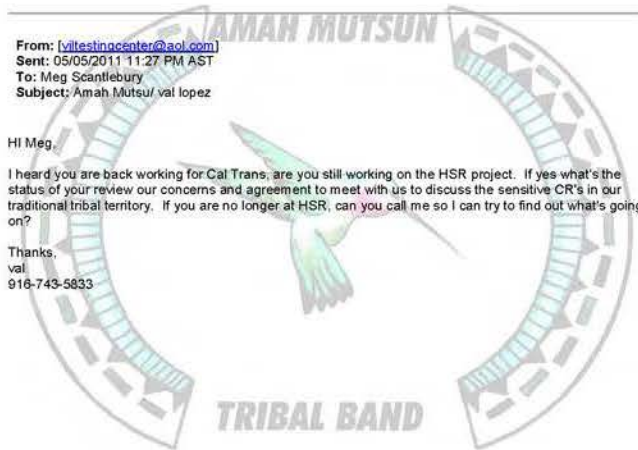
Hi Val - no, I no longer am working on HSR. ICFI is the CR firm for the SJ to Merced segment, You met Alisa Reynolds at one of the meetings. I suggest you contact her. Take care.

From: [vjtestingcenter@aol.com]
Sent: 05/05/2011 11:27 PM AST
To: Meg Scantlebury
Subject: Amah Mutsu/ val lopez

Hi Meg,

I heard you are back working for Cal Trans, are you still working on the HSR project. If yes what's the status of your review our concerns and agreement to meet with us to discuss the sensitive CR's in our traditional tribal territory. If you are no longer at HSR, can you call me so I can try to find out what's going on?

Thanks,
val
916-743-5833



Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

July 12, 2011

Dan Leavitt, Deputy Director
California High Speed Rail Authority
770 L Street
Sacramento, CA 95814

Bryan K. Porter, AICP
Environmental Planning Manager
Parsons Brinckerhoff
c/o 770 L Street
Sacramento, CA 95814

Dear Mr. Leavitt and Mr. Porter,

First of all we'd like to thank you for agreeing to meet with the Amah Mutsun Tribal Band on Friday, July 15, 2011. We're hopeful that this meeting can be the first step to establishing a working relationship based on mutual respect, honesty and trust.

Our goals for coming to this meeting include:

1. Development of a common understanding of each other's mandates;
2. Examination of the requisite legal consultation frame works of both state and federal laws. Specifically we would like to cover the Native American Heritage Commission's role, the required standards under the Section 106 Federal process, and the consultation process under California's SB 18 Consultation process.
3. It is the desire of the Amah Mutsun that our working relationship recognizes the legitimate rights and claims of our Tribe and that we effectively establish government to government consultation and cooperation that:
 - a. assures confidentiality of sensitive information;
 - b. works for the protection of our traditional Native way, our traditional beliefs and the environment;
 - c. truthfully and sincerely listens to the concerns and recommendations of each other;
 - d. diligently searches for ways to implement the recommendations for the protection of sensitive sites and cultural resources.
4. As we have expressed previously, we have concerns regarding the current alignment just outside Gilroy along Highway 152. This alignment cuts through two village sites and two sacred lakes, which have been drained. Many burials have been uncovered and removed from these locations. Therefore, in addition to discussing the realignment, we will be requesting a more rigorous archaeological study of the proposed alignments to determine each alignments probable impact on cultural resources.

60-427



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5. Finally, we would like to offer our assistance in helping the HSR learn how to navigate the complex and difficult process of working with California Native American Tribes.

As you can see we have many concerns to discuss and it will surely take more than one meeting to discuss them all. We do hope that this meeting puts us on the right path for finding the positive solutions that will work for the both of us.

kansireesum,

Valentin Lopez, Chairman
Amah Mutsun Tribal Band
(916) 743-5833



Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

From: Porter, Bryan <Porter@pbworld.com>
To: vlltestincenter@aol.com
Cc: dltestin@hst.ca.gov; melissa_dumond@dot.gov; Danae Aitchison <Danae.Aitchison@doj.ca.gov>
LJimenez@hst.ca.gov; Koby, Ann <Koby@pbworld.com>; Porter, Bryan <Porter@pbworld.com>; Rosen, Martin <m.Rosen@icfi.com>
Sent: Tue, Aug 2, 2011 11:54 am
Subject: Confidentiality Letter for the Amah Mutsun Tribe

Val - attached is the Authority's letter regarding the confidentiality of information for sacred sites and archaeological data shared between the Amah Mutsun and the Authority. Copies of two attachments can be downloaded through use of the link below. A hardcopy version of the letter and attachments is also being sent to you via US mail. Following your review of the letter, please call me should you have questions. I can be reached at 916/384-9522. Again, thank you for your patience in our preparing this response. We look forward to continue working with you. Many thanks.

https://ftp.pbworld.com/GetFile.aspx?fn=1645657546.zip
Bryan

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60-427



August 2, 2011

Chairman Valentin J. Lopez
Amah Mutsun Tribal Band
78 Sunshine Drive
P.O. Box 5272
Galt, CA 95632

RE: Amah Mutsun Confidentiality Letter

Dear Chairman Lopez,

The California High-Speed Rail Authority (Authority) thanks you for taking the time to meet with us here in Sacramento. We know that your time is important, and appreciate your frank and open discussion. We value the working relationship with you and hope to be as sensitive as possible to your concerns while continuing to be straightforward about what the Authority can authorize.

It is our understanding that the Tribe has requested that information regarding sacred sites and archaeological information be held confidential and not be revealed to the general public, the State Historic Preservation Officer's (SHPO) Information Centers, nor to any other Native American group or individual. The Authority is cognizant of its obligation to keep confidential any information it gathers or receives regarding the location of sacred and ceremonial sites and archaeological resources. The California Public Records Act exempts from public disclosure the records in the Authority's possession of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in sections 5097.9 and 5097.933 of the Public Resources Code, (Gov. Code, § 6254, subd. (i)). The Act also exempts from public disclosure records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency. (Gov. Code, § 6254.10.) In addition, the California Environmental Quality Act Guidelines prohibit inclusion of information about the location of archaeological sites and sacred lands in an environmental impact report. (CEQA Guidelines, § 15120, subd. (d).) Based on these legal provisions, the Authority will keep information on sacred and ceremonial sites and archaeological resources confidential and will not disclose such information to the general public.

Board Members:
Thomas J. Umbert
Lynn Schwab
Thomas Richards
Robert Balgourth
Russell Burns
David Crane
Jim Hartnett
Curt Pringle
Matthew Toledo

Reedot van Arh



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Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

Chairman Valentin J. Lopez
August 2, 2011
Page Two

Information about archaeological sites (sites with physical remains such as village sites, burial sites, midden deposits), including location, size, and nature, will be reported to the regional Information Centers and included in reports for the Authority's compliance with Section 106 of the National Historic Preservation Act (NHPA). As indicated in the attached "Information Center Rules of Operation Manual," information the Authority would report to the Information Centers pertaining to archaeological sites is managed as confidential, with access to and release of said information limited as indicated in section III of the manual. Those requesting access to the information must meet certain qualifications and sign a confidentiality agreement, samples of which are contained in the manual. The procedures are designed to protect the sensitive nature of this information.

The Authority will not report information on sacred sites (sites that lack any material remains or archaeological deposits) to the Information Centers. We note that if the Tribe were to register sacred sites with the Native American Heritage Commission (NAHC), this may help ensure confidentiality and protection for future projects in the area. While the Information Centers serve as official repositories for archaeological and historical site information, the NAHC serves in that capacity for sacred and ceremonial sites. Archaeologists through the practice of their profession are obligated to report archaeological and historical site locations to the Information Centers, but they are under no obligation to do so when it comes to sacred and ceremonial locations that lack cultural remains.

The cultural resource reports being prepared for the various segments of the California High-Speed Train are used to fulfill compliance with the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and Section 106 of the NHPA. By law the reports are required to be sent to the SHPO for review and concurrence on recommendations made pursuant to the significance of archaeological and historical sites. Native Americans serve a very valuable role in the process by sharing potential information they may have about localities important to their people. Under all circumstances this information is kept confidential and restricted to those people who have a legitimate need to know. Those individuals with a legitimate need to know include other cultural resource professionals, project designers, and environmental planners. However, information would only be released to other cultural resource professionals whose conduct is governed by the confidentiality agreements they have signed.

60-427

Chairman Valentin J. Lopez
August 2, 2011
Page Three

Other Native American groups or individuals identified by the NAHC as having interest in the area may be included in the sharing of information in the section 106 process. This form of information sharing happens frequently, and can be anticipated for a project like the High-Speed Train, which has long corridors that cross-cut many tribal areas. If the Amah Mutsun share with the Authority what they know about sacred or ceremonial sites in their area of concern, however, the Authority is not obligated to share that information with other tribes. Shared information could include known archaeological sites, but it does not need to include ceremonial or sacred places whose significance resides primarily among a single band.

Regarding the request for government-to-government consultation, a Programmatic Agreement between the Authority, FRA, SHPO and ACHP was signed on July 22, 2011, authorizing the Authority to formally consult with non-Federally-recognized Native American Groups (Stipulation IV B. 1). We enclose a copy of the Programmatic Agreement for your information.

The Authority is committed to working with the Amah Mutsun Tribal Band to help protect your traditional cultural places, and to work with you to avoid cultural sites and resources. In addition, we will continue to meet with you and other Amah Mutsun tribal representatives, as needed, to discuss issues or concerns you have regarding the project.

Thank you.
Dan Leavitt, Deputy Director
California High-Speed Rail Authority

- Enclosures:
1. CA Historical Resources Information System, Information Center Rules of Operations Manual
2. Section 106 Programmatic Agreement

Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 21, 2012) - Continued



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60-427

August 31, 2011

Bryan K. Porter, AICP
Environmental Planning Manager
Parsons Brinckerhoff
c/o 770 L Street
Sacramento, CA 95814

Dear Mr. Porter,

This letter is a follow-up to the phone conversation we had earlier this week. In our phone conversation I spoke of how our Tribe felt disrespected by having a letter regarding confidentiality sent to us that was in final and had been reviewed by the California Department of Justice. It was our understanding that the High Speed Rail (HSR) would be drafting a Confidentiality Agreement for our review and input and then after this letter had been negotiated we would have an acceptable agreement which would be signed by both parties. This is the process we have used many times in the past with both public and private entities. The same is true for the Programmatic Agreement; in fact, we sent you a draft agreement that was a template of what we have used in the past. What we got back was a final agreement that had been signed and approved by everyone but the Tribe; and our signature wasn't required or solicited. Once again we have negotiated Programmatic Agreements in the past and never had an agency presented us with a signed Programmatic Agreement that was a final document.

When we met in July, I began by saying trust is an issue and that before we can move forward in any meaningful way we would have to first establish a foundation of trust, respect and honesty. Both the Confidentiality Agreement and Programmatic Agreement failed to do this.

In our conversation I told you that I was about to write a letter to the HSR to present our objections to your documents. I also said this is a very important project for our Tribe. The HSR will have a very significant impact on our Tribe. The better we can communicate and understand each other the better we can minimize the impact on the remains of our ancestors and the cultural resources they left in our care. It is for this reason that we are now requesting another meeting so



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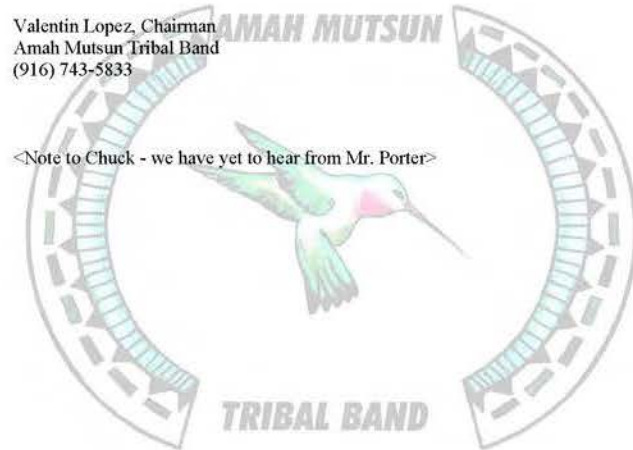
60-427

we can start to build the foundation that is needed to insert trust and respect into this relationship and this project. The best days for us to meet are on Thursdays and Fridays in the afternoon. Please call me at your convenience so we can schedule a meeting.

Sincerely,

Valentin Lopez, Chairman
Amah Mutsun Tribal Band
(916) 743-5833

<Note to Chuck - we have yet to hear from Mr. Porter>



Response to Submission 60 (Valentin Lopez, Amah Mutsun Tribal Band, February 24, 2012)

60-423

The Authority acknowledges and appreciates receiving the information regarding the Amah Mutsun Tribal Band and its connections to Santa Cruz, south Santa Clara, and northern Monterey and San Benito counties and the Gilroy area. Chapter 3.12 of the 2008 Final Program EIR addressed cultural and paleontological resources and how the first-tier project in the Bay Area to Central Valley study area might affect those resources. The chapter describes the process the Federal Railroad Administration and the Authority have followed to comply with Section 106 of the National Historic Preservation Act. The chapter also discusses the methodologies used for assessing impacts under CEQA and NEPA, and the consultation effort facilitated through the Native American Heritage Commission. Tribal consultation for the 2005 Statewide Final Program EIR was informed by input from the Amah Mutsun Tribal Band, which subsequently informed the analysis in the Bay Area to Central Valley Program EIR. Chapter 3.12 identified that impacts in the corridor between San Jose and the Central Valley over the Pacheco Pass would be significant and programmatic mitigation strategies are described. The chapter notes that the Authority would comply with all laws and regulations related to the discovery of subsurface human remains and artifacts, and also explains the anticipated process for developing a "Programmatic Agreement" to specify expectations for second-tier, project-level EIR analysis and Section 106 compliance. The Authority has prepared such a Programmatic Agreement with the Federal Railroad Administration, the Advisory Council on Historic Preservation and the State Historic Preservation Officer setting forth the process with more specificity. (Programmatic Agreement, July 15 2011.)

The Authority staff and the Federal Railroad Administration notified over 50 Native American tribal organizations and held a meeting on August 24, 2007, to discuss the Bay Area to Central Valley Draft Program EIR/EIS and to solicit input as noted in Chapter 10, Public and Agency Involvement, in the 2008 Final Program EIR. The Authority has also continued to provide Native American organizations with notices and documents for review and input

including the 2010 Revised Draft/Final Program EIR and the 2012 Partially Revised Final Program EIR.

The Authority disagrees that the project would negatively affect the hydrologic function of the affected basins or erode or expose cultural resources. Chapter 3.14, Hydrology and Water Resources, in the 2008 Final Program EIR indicates that the potential for erosion due to runoff would primarily be limited to locations of erosive soil conditions within the Diablo Range where tunnels and earthwork would be required. In addition, a mitigation strategy provided includes minimizing the footprint of facilities within floodplains through design changes or use of aerial structures. Additional mitigation strategies include the use of best management practices (BMPs) including erosion control requirements to minimize erosion during and after construction. The mitigation strategies listed in Section 3.14.5 are expected to reduce impacts to hydrology and water quality to a less-than-significant level.

60-424

Comment acknowledged. The Authority has benefited from increased staff resources and is committed to developing a meaningful, productive working relationship with the Amah Mutsun Tribal Band.

60-425

The Partially Revised Draft Program EIR was developed to address issues in court rulings as a result of the Town of Atherton CEQA litigation cases. Additional analysis on cultural resources issues was not identified by the court for further evaluation under CEQA. The cultural resources evaluation prepared for the 2008 Final Program EIR is contained in Chapter 3.12, and Appendix 3.12A (Bay Area to Merced, Cultural Resources Archaeology Technical Evaluation, Far Western Anthropological Research Group, Inc., January 2004 and Bay Area to Merced, Cultural Resources: Historic Architecture Technical Evaluation, JRP Historical Consulting Services 2004.)

60-426

The Authority appreciates the comments from the Amah Mutsun Tribal Band and looks forward to a positive working relationship in the development of the second-tier projects and EIRs that may be of interest to the tribe.

60-427

This submission includes correspondence between the Amah Mutsun tribal band, Federal Highway Administration, the Authority, and the Authority's consultants. It does not contain comments on the 2012 Partially Revised Draft Program EIR.

13 Response to Comments from State Agencies

Submission 18 (T.M. Becher, California Highway Patrol, Golden Gate Division, January 11, 2012)

State of California—Business, Transportation and Housing Agency EDMUND G. BROWN Jr., Governor
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
Golden Gate Division
1551 Benicia Road
Vallejo, CA 94591
7076484180
(800) 735-2929 (T/T/TDD)
(800) 735-2922 (Voice)



3588

01-11-12P03:00 RCVD

January 9, 2012

File No.: 301.12877.A12542

Mr. John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Dear Mr. Mason:

18-537

Please make the following name correction for any information that is mailed to our office:

Chief Teresa Becher
California Highway Patrol
Golden Gate Division
1551 Benicia Road
Vallejo, CA 94591-7568

I have attached two mailings that we recently received for comparison. Thank you.

Sincerely,

T.M. Becher signature

T. M. Becher
Chief

Attachments



RECEIVED

JAN - 9 2012

GOLDEN GATE DIVISION
301

770 L Street, Suite 800
Sacramento, CA 95814



Jim Innes
1551 Benicia Rd
Vallejo, CA 94591-7572

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94591-7568 0068



Response to Submission 18 (T.M. Becher, California Highway Patrol, Golden Gate Division, January 11, 2012)

18-537

The Authority's mailing list has been updated as requested.

14 Response to Comments from Local Agencies

Submission 8 (Yvonne Arroyo, Santa Clara Valley Water District, January 9, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #8 DETAIL

Status : Pending
Record Date : 1/9/2012
Response Requested : Yes
Stakeholder Type : Government
Submission Date : 1/9/2012
Submission Method : Website
First Name : yvonne
Last Name : arroyo
Professional Title : Associate Engineer
Business/Organization : Santa Clara Valley Water District
Address :
Apt./Suite No. :
City : San Jose
State : CA
Zip Code : 95118
Telephone :
Email : yarroyo@valleywater.org
Cell Phone :
Email Subscription : Statewide Planning Only, San Francisco - San Jose, San Jose - Merced
Add to Mailing List : Yes
Stakeholder Comments/Issues : I would like a CD of the document--"Bay Area to Central Valley HST Partially Revised Draft Program EIR"
EIR Comment : No

8-65

Response to Submission 8 (Yvonne Arroyo, Santa Clara Valley Water District, February 22, 2012)

8-65

A CD was provided as requested in January 2012.

Submission 17 (Celia Aceves, Modesto Irrigation District, January 24, 2012)



1231 Elevation St.
P.O. Box 4050
Modesto, CA 95368
(209) 526-7273

January 20, 2012

3751
01-24-12P02143 RCVD

California High-Speed Rail Authority
Attention: John Mason
770 L Street, Suite 800
Sacramento, CA 95814

**RE: Bay Area to Central Valley partially Revised Draft Program EIR
Location: Altamont Pass & Pacheco Pass**

Dear Mr. Mason:

Thank you for allowing the District to comment on this referral. Following are the recommendations from our Risk & Property, Electrical, Irrigation and Domestic Water Divisions:

17-1 **Irrigation**

- The Modesto Irrigation District (MID) has a network of irrigation facilities that run generally in an east to west direction from the Sierra foothills to the San Joaquin River. Both corridor options (BNSF and SPRR) being considered by the California High-Speed Rail Authority bisect the MID and its canals, pipelines and drains.
- Study of the effects of the construction and operation of the proposed high-speed rail system on the MID irrigation facilities needs to be completed to determine what impact, if any, the new rail system will have. Many of the pipelines and canals crossing the existing railroad facilities are over 70 years old.
- Operation and maintenance access to existing MID irrigation and drainage facilities must be maintained both during construction and operation of the proposed rail system.

Domestic Water/Risk & Property

- No comments at this time. Comments will be provided as more detailed plans are submitted for review.

Electrical

- The MID Electric Division does not have any comments at this time. Comments will be provided as more detailed plans are submitted for review.

The Modesto Irrigation District reserves its future rights to utilize its property, including its canal and electrical easements and rights-of-way, in a manner it deems necessary for the installation and maintenance of electric, irrigation, agricultural and urban drainage, domestic water and telecommunication facilities. These needs, which have not yet been determined, may consist of poles, crossarms, wires, cables, braces, insulators, transformers, service lines, open channels, pipelines, control structures and any necessary appurtenances, as may, in District's opinion, be necessary or desirable.

If you have any questions, please contact me at 526-7433.

Sincerely,

Celia Aceves
Risk & Property Analyst

Copy: File

ORGANIZED 1987 • IRRIGATION WATER 1904 • POWER 1923 • DOMESTIC WATER 1994

Response to Submission 17 (Celia Aceves, Modesto Irrigation District, February 25, 2012)

17-1

Comment acknowledged. Chapter 3.10 of the 2008 Final Program EIR assessed public utility conflicts at a broad scale, with a focus on major conflicts such as electrical transmission lines, electrical substations or power stations, natural gas pipelines, and wastewater treatment facilities as representative of utility impacts. Utilities conflicts are considered significant, and mitigation strategies were identified. Section 3.10.6 explains that impacts on water supply utilities, such as irrigation districts, will be considered in detail as part of second-tier environmental review. Also refer to Standard Response 3 regarding level of detail.

Submission 19 (Larry Klein, City of Palo Alto, January 26, 2012)

JAN 26 2012 THU 03:30 PM PALO ALTO CITY COUNCIL FAX NO. 650 325 5025 P. 01

JAN 26 2012 THU 03:30 PM PALO ALTO CITY COUNCIL FAX NO. 650 325 5025 P. 01

City of Palo Alto
Office of the Mayor and City Council

January 26, 2012

John Mason
California High Speed Rail Authority
770 L Street, Suite 600
Sacramento, CA 95814

Subject: Public Comment Period Extension - Bay Area to Central Valley High-Speed Train (HST) Partially Revised Program Environmental Impact Report (EIR)

Dear Mr. Mason

19-15

The City of Palo Alto is writing you today to ask for an indefinite delay in the Bay Area to Central Valley HST Partially Revised Draft Program EIR recirculation public comment period because the California High Speed Rail Authority (CHSRA) has yet to release ALL traffic data used to support its findings, including the actual traffic capacity studies for each project segment.

As you know, recirculation is required by court order to address the impacts of potentially moving freight tracks closer to adjacent land uses along the San Francisco Peninsula and to address impacts of reduced access to surface streets from potential lane closure along the San Francisco Peninsula. Yet for our Transportation Division to effectively and fully respond to this recirculated document all supporting data for the Authority's assertions must be provided to understand exactly how the conclusions were reached.

Until those documents are provided there should be no expectation that the City of Palo Alto can fully and accurately comment on this document.

Thus, the City of Palo Alto requests an indefinite delay in the Bay Area to Central Valley HST Partially Revised Draft Program EIR recirculation public comment period until ALL documentation used to reach the conclusion presented by the CHSRA is provided. Once all of that requested data is released, the City will respond within an appropriate timeframe.

Thank you for your time and we look forward to your written response.

Sincerely,

Larry Klein
City Council Member and Chair of the Rail Committee
City of Palo Alto

- Palo Alto City Council
- Palo Alto City Manager
- US Secretary of Transportation Ray LaHood
- US Senator Barbara Boxer
- US Senator Dianne Feinstein
- US Congresswoman Anna Eshoo
- US Congressman John Mica
- California Governor Jerry Brown
- California Senator Joe Simitian
- California Senator Abel Lowenthal
- California Senator Mark DeSaulnier
- California Assemblymember Rich Gordon
- California Assemblymember Barbara Lowenthal
- CHSRA CEO Rodolfo Anzures

P.O. Box 10020
Palo Alto, CA 94303
650.329.2177
650.325.2631 fax



City Manager's Office
250 Hamilton Avenue
Palo Alto, CA 94301
Fax: 650 325-5025

3761

01-26-12P03:13 RCVD

CITY OF PALO ALTO

Fax

To: John Mason
From: Larry Klein
Fax: (916) 322-0827
Pages: 2 (including cover)
Date: 1/26/2012
Phone: (650) 329-2477
City: Palo Alto
CC:

URGENT For Review Please Comment Please Reply Please Recycle

Response to Submission 19 (Larry Klein, City of Palo Alto, February 27, 2012)

19-15

The Authority acknowledges the City of Palo Alto's January 25, 2012, letter requesting an indefinite extension of time on the comment period for the Partially Revised Draft Program EIR. This request included a statement that the Authority had not released all traffic data used to support the revised Program EIR. The Authority received the letter on the afternoon of January 26, 2012 by facsimile. As of January 26, 2012, the Authority had not received a request from the City of Palo Alto to receive the underlying traffic data supporting the traffic analysis in the Partially Revised Draft Program EIR. In response, an Authority staff person contacted the City of Palo Alto by telephone on January 30, 2012, to inquire about the City's data needs, and was able to discuss the request on January 31, 2012. Based on that contact, the Authority provided one requested item by email - VTA Traffic Impact Analysis Guidelines by email on February 3, 2012. Additional data and information was provided on February 6, 2012, by email. The comment period provided for the Partially Revised Draft Program EIR was 45 days, concluded on February 21, 2012, and was not extended.

Submission 24 (Larry Patterson, City of San Mateo, February 12, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #24 DETAIL

Status : Action Completed
Record Date : 2/12/2012
Response Requested : Yes
Stakeholder Type : Government
Submission Date : 2/12/2012
Submission Method : Website
First Name : Larry
Last Name : Patterson
Professional Title : Director of Public Works
Business/Organization : City of San Mateo
Address :
Apt./Suite No. :
City : San Mateo
State : CA
Zip Code : 94403
Telephone : 650-522-7303
Email : lpatterson@cityofsanmateo.org
Cell Phone :
Email Subscription : San Francisco - San Jose, San Jose - Merced
Add to Mailing List : Yes
Stakeholder Comments/Issues : The comment period closes at the end of business on February 21, 2012. Our City Council does not meet until the evening of February 21st and therefore will not approve our comment letter until after normal business hours. Will our comments be considered and receive a response if not emailed until the evening of February 21, 2012?
EIR Comment : No

24-58

Response to Submission 24 (Larry Patterson, City of San Mateo, February 22, 2012)

24-58

Comment acknowledged. The Authority will consider the City's comments as they were received via email on the evening of February 21, 2012.

Submission 30 (Andy Klein, City of San Carlos, February 16, 2012)

CITY OF SAN CARLOS

CITY COUNCIL
ANDY KLEIN, MAYOR
MACT GREGGOTT, VICE MAYOR
RON COLLINS
ROBERT GRASSLELLI
MARK OLBERT



CITY COUNCIL
600 ELM STREET
SAN CARLOS, CALIFORNIA 94070-3085
TELEPHONE: (650) 802-4219
FAX: (650) 595-6719
WWW: http://www.cityofsan-carlos.org

3920
02-16-12P02:40 RCVD

30-33

February 14, 2012

Mr. John Mason
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
Attn: Bay Area to Central Valley HST Partially Revised Program EIR Comment

Re: City of San Carlos Comments - Bay Area to Central Valley HST Partially Revised Program EIR

Dear Mr. Mason,

On behalf of the City of San Carlos, I am writing to comment on the recently released Bay Area to Central Valley HST Partially Revised Program EIR. Of particular interest to San Carlos is Section 3 of the document which discusses potential loss of traffic lanes parallel to the CalTrain Right of Way along the Peninsula, traffic service level impacts of the original CHSR designs and design practices that could be used to avoid these impacts. This report was discussed at the February 13, 2012 City Council Meeting and this letter reflects those discussions.

Initial Comments on CHSR

The City of San Carlos has been an active participant in the discussions, workshops and meetings regarding the proposed California High Speed Rail system since these proposals emerged in 2008. The City has provided input, feedback and comments during the process including the monthly meetings with CHSR engineers and staff. (A copy of the City's detailed comment letter regarding the California High Speed Rail Alternatives Analysis dated May 11, 2010 is attached for your review.)

Section 3.3 - Environmental Consequences - Potential Lane Reductions/Loss

Section 3.3 of the Partially Revised DEIR discusses the potential reduction or loss of lanes on Old County Road in San Carlos if the original Overhead or Underground CHSR designs are utilized in a 4 Track CHSR project. (See page 3-6)

What the Partially Revised DEIR fails to consider is that CHSR, CalTrain and City Staff, along with CHSR project engineers and designers from HNTB, have developed an Alternative 4 Track Design for CHSR and CalTrain Electrification which addressed and resolved these problems.

The Alternative Design involves a 4 Track Overhead Alignment that moves the San Carlos CalTrain Platform south towards Arroyo Avenue and uses the 20 feet of Right of Way reserved for CHSR and CalTrain Electrification in the Proposed San Carlos Transit Village Project. With these changes, the engineers at HNTB have designed an Alternative that fits 4 CHSR/CalTrain electrified tracks into the existing right of way and does not result in lane closures or significant impacts to the street or neighboring properties in San Carlos.

Staff has confirmed with CHSR, CalTrain and HNTB on numerous occasions that the Alternative Design for San Carlos will be incorporated into future versions of the CHSR and CalTrain planning and designs if a 4 Track alignment moves forward. However, this design and information is missing from the Partially Revised DEIR document. This explains the document's continued commentary about earlier designs that could result in impacts to Old County Road under the initial Overhead and Underground 4 Track Designs through San Carlos. The City believes that this omission should be corrected and the Alternative Design should be included in and considered in the Partially Revised DEIR.

Tables 3-1 and 3.2 - Traffic Service Levels - Potential Lane Reductions/Loss

These tables in the Partially Revised DEIR discuss the potential reduction or loss of lanes on Old County Road in San Carlos if the original Overhead or Underground CHSR designs are utilized in a 4 Track CHSR project. (See page 3-9 through 3-14).

The City believes that these tables should be updated to take into account the impact that the Alternative Design in San Carlos would have on these projected Traffic Service Levels and this information should be included in the Partially Revised DEIR.

Conclusion

San Carlos plans to continue to be an active participant in the study process for California High Speed Rail and CalTrain Electrification as these projects continue their review and engineering work. We appreciate your support and work on this project. If you have any questions, please contact me or Brian Moura, Assistant City Manager, at (650) 802-4210.

Sincerely,

Handwritten signature of Andy Klein

Andy Klein
Mayor

- cc: State Senator Joe Simitian
Assembly Member Rich Gordon
Roelof Van Ark, CEO, California High-Speed Rail Authority
Dominic Spaethling, Regional Manager, California High-Speed Rail Authority
Mike Scanlon, CEO, CalTrain/Peninsula Joint Powers Board
Marian Lee, Acting Director, CalTrain Modernization Program, CalTrain

30-33



Response to Submission 30 (Andy Klein, City of San Carlos, February 17, 2012)

30-33

The Authority acknowledges and appreciates the City of San Carlos' regular participation in the planning effort for a second-tier project along the Caltrain Corridor.

The purpose of the Partially Revised Draft Program EIR was to provide a conservative analysis of the traffic effects of implementing a four-track alignment in an at-grade or existing grade configuration that would require the largest amount of expansion to the existing Caltrain right-of-way. For first-tier programmatic EIR purposes, this analysis provides a "worst case" in terms of right-of-way and loss of parallel traffic lanes.

The comment correctly identifies that as part of second-tier planning and refined engineering, a new design has been developed that could accommodate a four-track shared use system such that it would not result in lanes closures to Old County Road. As indicated in the comment, this second-tier design solution is anticipated to substantially reduce and even avoid lane closures and impacts on the street and neighboring properties. It is fully anticipated that this design, or some variation on this design that maintains full capacity for Old County Road, would be addressed in the second-tier, project-level EIR document if an alignment on the Caltrain Corridor is part of the network alternative the Authority Board selects at the conclusion for this Program EIR process.

Submission 31 (Jerry Deal, City of Burlingame, February 16, 2012)



The City of Burlingame
501 PRIMROSE ROAD, BURLINGAME, CA 94010-3997
www.burlingame.org

3923
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JERRY DEAL, MAYOR
ANAN KEIGHRAN, VICE MAYOR
MICHAEL BROCKBRUGH, COUNCILMEMBER
CATHY BAYLOCK, COUNCILMEMBER
TERRY NAGEL, COUNCILMEMBER

TEL: (650) 558-7200
FAX: (650) 342-8388
EMAIL: council@burlingame.org

California High Speed Rail Authority
Attn: Dan Richard, Chairperson
925 L Street, Suite 1425
Sacramento, CA 95814

February 10, 2012

Subject: Public Comment Period Extension for the Bay Area to Central Valley High-Speed Train (HST) Partially Revised Program Environmental Impact Report (EIR); and Business / Funding Plan review comments

Dear Mr. Richard:

The City of Burlingame is writing to you on two issues regarding the California High Speed Rail project. The first is to ask for a delay in the public comment period for the Bay Area to Central Valley HST Partially Revised Draft Program EIR recirculated document. The second issue requests recirculating the Business / Funding Plan which lacks core elements.

31-29

Public Comment Period Extension - Bay Area to Central Valley HST Partially Revised Program EIR

The comment period for the Bay Area to Central Valley HST Partially Revised Program EIR for the California High Speed Rail Authority (CHSRA) has yet to release ALL traffic data used to support its findings, including the actual traffic capacity studies for each project segment. The document needs to address the impacts of potentially moving freight tracks closer to adjacent land uses along the San Francisco Peninsula rail corridor; and to address impacts of reduced access to surface streets from potential lane closures along the San Francisco Peninsula. Yet, for an accurate assessment of the recirculated document all supporting data for the Authority's assertions must be provided to understand exactly how the conclusions were reached. Until these documents are provided there should be no expectation that the City of Burlingame can fully and accurately comment on this document. Therefore the City of Burlingame requests an indefinite delay in the Bay Area to Central Valley HST Partially Revised Draft Program EIR recirculation public comment period until ALL documents are provided that were used to reach the conclusions presented by the CHSRA. Once the data is released, the City will respond within an appropriate timeframe.

31-510

Draft 2012 Business / Funding Plan Comments

The Business / Funding Plan lacks core elements that need to be addressed before final review of the document. We have reviewed and support the comments prepared by one of our member agencies as itemized below.

31-510

General Comments

- There are multiple references in the Plan to the social benefits of HSR. Despite how much the City may either support or object to these benefits, they are not relevant to the financial legitimacy of this project or the Plan (Page ES-4);
Using European high-speed rail (HSR) data as the basis for California HSR predictions ignores too many cultural and geographic differences and in no way should be used as a basis for making California HSR predictions (Page ES-5);
The following statement needs to be quantified with specific timeframes, types, and locations of job creation: "With implementation of the HSR system in California, as many as 400,000 long-term jobs could be created as the state's economy becomes more efficient." (Page ES-5);
In November 2008, at the time Proposition 1A passed, the CHSRA represented to the voters that construction of a true, statewide HSR system would be completed by approximately 2020. Now, the Plan states the CHSRA does not plan to have a true, statewide HSR system completed until 2030 or beyond. The CHSRA must account for this misrepresentation to the voters (Page ES-9);

- Comparing the cost of the proposed HSR system to the cost of constructing infrastructure with an equal capacity in the form of highway lanes, airport gates, and runways does not accurately account for the fact that many of those assets are not currently at maximum capacity. The Plan should quantify remaining capacity of other transportation systems in order to provide an accurate comparison to the high estimate cost of HSR (Page 1-3);

31-511

Capital Costs

- The total cost of viaducts, tunnels, and trenches in the 2009 Business Plan was estimated at approximately \$10B. That number has since increased to approximately \$31.5B on the low end to \$40B on the high end. The City would like to see where the CHSRA plans on building these structures so the City can evaluate how the construction correlates with the mitigation (Page 3-6);

31-512

Ridership

- Despite updates made to the ridership model prior to the publication of the Plan, inherent flaws in that model still exist and are reflected in the CHSRA ridership assumptions. Essentially, all the CHSRA has done with the ridership model is spread it out further over time (in correlation with the revised project timeline). The ridership projection errors can only be fixed by the development of a new ridership model and release of a new ridership study. Until that is done no assumptions about ridership reflected in the Plan can be considered reliable (Chapter 6);
The Plan states that, "Population has a direct correlation with ridership." However, it is not population alone which determines ridership estimates. Rather, it is population that can afford to ride HSR located in its vicinity. Therefore, generating ridership figures with projected population growth alone as an input is not reliable. Further, the consequences of this are exaggerated in a phased approach (Page 6-5);

31-513

Operating & Maintenance

- The CHSRA has repeatedly asserted that California HSR will not require an operating subsidy and asserts that it has "validated its operations and maintenance plans ... with international high-speed rail operators." If so, then the City would like a detailed explanation of how the CHSRA accounts for a 2008 OECD study that found that rail subsidies in France, Germany, Spain and the Netherlands came to

Submission 31 (Jerry Deal, City of Burlingame, February 16, 2012) - Continued

31-513 45% of the total expenditures of the rail systems (<http://www.cecd.library.org/transport/the-economic-effects-of-high-speed-rail-investment-235171703146>). (Page 7-2)

31-514 Risk Mitigation

- Additional ridership projection work should be done now, before construction begins, not "prior to initiating a private-sector financing transaction." (Page 9-11);
- Vulnerabilities associated with private financing are not a "perceived risk" but a real risk (Page 9-12);
- Outstanding conflicts surrounding Union Pacific Right of Way (ROW) are yet to be accounted for in sufficient detail and have a direct impact on any business plan that assumes said ROW will be available for use (Page 9-13);

31-515 Phasing

- Environmental impacts that result from the disconnect between the way the system was segmented for environmental review versus the way the system is being segmented for construction of an initial construction segment (ICS) and initial operating segment (IOS) must be reconciled (Chapter 2);
- Terminology is used in the Plan that is not consistent with Prop 1A. For example, no mention of an ICS can be found in Prop 1A. As stated in the proposition language, Prop 1A only allows for bond expenditures on a HSR segment that is electrified and contains all of the components of a true HSR system. Therefore, the City objects to the expenditure of Prop 1A funds on an ICS until, at a minimum, all of the funding for an IOS has been identified and secured (Page 2-9);
- The Plan, like the 2009 Business Plan and other CHSRA documents, appears as though it is capital constraint driven. The City feels this has been a continuing issue with the project and despite the CHSRA's desires to use America Recovery and Reinvestment Act (ARRA) funds the deadlines associated with them should not be the basis for construction and environmental review decisions (Page 2-9);

31-516 Financing

- The Authority's estimate of the project cost has essentially tripled since 2008. The City would like to know what process the CHSRA intends to use to ensure that 1) the project cost does not increase any further, and 2) this cost increase is appropriately vetted with stakeholders (Chapter 8);
- AB 3034 states the business plan shall include, identify, or certify a number of items including, "the sources of all funds to be invested in the corridor, or usable segment thereof, and the anticipated time of receipt of those funds based on expected commitments, authorizations, agreements, allocations, or other means." Therefore, the City feels that the identification of funds for an ICS does not satisfy AB 3034 and only until the source of funds for an IOS is identified does the CHSRA even have the legal grounds to move forward with construction (Chapter 8);
- It is not clear who would be responsible to make up the funding gap if private funding doesn't materialize (Chapter 8);
- The CHSRA's assertion that a dedicated HSR funding source similar to the Highway Trust Fund could be created is highly speculative and should in no way be relied upon (Page 8-6);
- In continuation from the previous issue, the CHSRA's claims relating to availability payments and Qualified Tax Credit Bonds (QTCB) are equally speculative and unreliable (Page 8-7);

31-516

- In year of expenditure (YOE) dollars, the total capital cost of completing the "Bay to Basin" (B to B) portion of the system is estimated to be \$54.3B. Thus, to complete what many would argue is the minimum system necessary to avoid an operating subsidy, the CHSRA is currently relying upon the receipt of \$30.3B of additional federal money (or 56.2% of the total B to B cost). This assumption seems to completely ignore the current federal government fiscal, economic and political landscape and puts the state at great financial risk if this prediction turns out to be false. The likelihood of securing this funding is highly speculative at best. Therefore, the CHSRA must have measures in place to mitigate this risk and a clear contingency plan (Page 8-34);

31-31 Funding Plan dated November 3, 2011

- The CHSRA has clearly identified funding sources for an initial construction segment (ICS) but has not identified funding sources for an initial operating segment (IOS). Thus, this funding plan fails to satisfy the requirements of Prop. 1A as it does not identify funding sources for a **USABLE** segment, or IOS (Page 1);
- Since the expenditure of Prop 1A bond funds is predicated on the construction of a usable segment, what that usable segment is should be identified. Stating that "the Authority is advancing a detailed phasing plan that contains two options for its Initial Operating Section" is not sufficient. A usable segment, or IOS, should be clearly identified first (Page 2);
- The Funding Plan states that, "the Authority will have, prior to expending Bond Act proceeds requested in connection with this Funding Plan, completed all necessary project level environmental clearances necessary to proceed to construction." At this time; however, the referenced environmental clearances are not complete. Thus, a full understanding of what is necessary to gain California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) clearance and the associated costs of that clearance (as would be identified in a finalized EIR) doesn't exist either. Therefore, the CHSRA should complete all necessary project level environmental clearances for a usable segment, or IOS, before expending any Prop. 1A bond funds on construction, so the full cost of both a complete environmental review and any associated mitigations is fully accounted for. (Page 14).

We look forward to your written response to our comments and questions.

Thank you



Jerry Deal, Mayor
City of Burlingame

C: Burlingame City Council, Burlingame City Manager
US Secretary of Transportation Ray LaHood, US Senator Barbara Boxer, US Senator Dianne Feinstein, US Congresswoman Anna Eshoo, US Congressman John Mica
California (CA) Governor Jerry Brown, CA Senator Joe Simitian, CA Senator Alan Lowenthal, CA Senator Mark DeSaulnier, CA Assemblymember Rich Gordon, CA Assemblymember Bonnie Lowenthal, CHASRA CEO Roelof van Ark

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Response to Submission 31 (Jerry Deal, City of Burlingame, February 17, 2012)

31-29

It appears that the comment is requesting an extension to the comment period to have time to review the technical information that was the basis of the Partially Revised Draft Program EIR. This technical information is available from the Authority, was listed in the references chapter (Chapter 9), and was provided in response to information requests from other commenters. The City of Burlingame did not submit a request for the technical memoranda or other technical information during the comment period.

The commenter is referred to Chapter 2 of the Partially Revised Draft Program EIR, which provides the noise analysis of potentially moving freight traffic closer to adjacent land uses. The traffic effects of the potential lane closures are addressed in Chapter 3.

The Authority respectfully declines to extend the comment period, which ran for 45 days, pursuant to CEQA.

31-510

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. The 2012 Draft Business Plan, which was released to the public in November 2011, was developed to support the state’s financial and investment planning for the HSR system. In contrast to the purpose of the Business Plan, the primary purpose of this Program EIR is to help the Authority appropriately analyze and understand the potential environmental impacts of the project and to selected a preferred alternative for the Bay Area to Central Valley.

CEQA requires a final EIR to respond to the responsible comments received on environmental issues (see 14 CCR §15088(a)). The Partially Revised Draft Program EIR reviewed new information and changed conditions, which included the information presented in the 2012 Draft Business Plan. The remainder of the comments does not address an environmental issue.

Additional questions and comments on the Draft 2012 Business Plan would best be submitted through the Authority’s website

http://www.cahighspeedrail.ca.gov/contact.aspx?cat=Draft_2012_Business_Plan_Comments

31-511

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. The 2012 Draft Business Plan cost estimates are not addressed in the Partially Revised Draft Program EIR. The cost data is available in the supporting documents to the 2012 Draft Business Plan, “Cost Changes from 2009 Report to 2012 Business Plan Capital Cost Estimates,” <http://www.cahighspeedrail.ca.gov/assets/0/152/302/321/02fa2469-ef00-4eb0-ac78-74edff7b4fc3.pdf>

Additional questions and comments on the 2012 Draft Business Plan would best be submitted through the Authority’s website http://www.cahighspeedrail.ca.gov/contact.aspx?cat=Draft_2012_Business_Plan_Comments

31-512

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. Please refer to Response to Comment 31-510.

31-513

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. Please refer to Response to Comment 31-510. The City has misinterpreted the paper, which shows the costs and revenues of all rail services, including commuter and regional passenger and freight. (All of the former have operating subsidies, as do some of the freight services). The City also confuses the concept of “operating profit” with the capital and operating balances shown in the paper. HSR services are not shown separately; had they been, a strong operating profit would have

been shown, as is projected for the California HSR. (See for example, World Bank 2010, p. 14¹)

Although the referenced link is not working any longer, or is incorrect, a 2008 paper by a Canary Islands professor, Ginés de Rus, published in a round-table report by the OECD, appears to be the basis for this comment (See De Rus, "The Economic Effects of High-Speed Rail Investment", University of Las Palmas, Canary Islands, Spain, 2008, in "Round Table 145" at http://www.keepeek.com/Digital-Asset-Management/oecd/transport/competitive-interaction-between-airports-airlines-and-high-speed-rail_9789282102466-en pp. 165-200).

The statistic cited by the City is not presented in the paper, and appears to have been calculated from Table 5 "Rail Accounts", which shows the four countries' rail revenues and costs apparently in the year 1998 (see illustration). The first revenue line states it includes freight revenues, and the first cost item is for infrastructure costs. A check of French railways accounts from 2005/2006 (Standard & Poors 2006) indicates that these figures also include the revenues and costs for all the rail operations, not just the HSR lines. The strong operating results of the HSR services are thus submerged in the larger railways' operating losses or weak surpluses.

Moreover, this table includes costs of capital infrastructure investment, which are specifically excluded from the operating profit

¹ Operating and maintenance costs of high-speed rail are generally low by comparison with the capital costs, and speed delivers better equipment and train crew turn-round times. The Shinkansen lines of Japan East (which include the comparatively lightly-used Joetsu and Nagano lines) have a working ratio (of operating cost excluding depreciation to revenue) of 40 percent and an operating ratio (of operating cost including depreciation to revenue) of 55 percent. The TGV Sud Est line in France also had a working ratio of 40 percent for about a decade after it opened and an operating ratio (including interest) of just over 60 percent. Even the troubled THSR high-speed line had a working ratio of less than 50 percent within a year of opening.

Amos, Bollock, Sondhi, "High-Speed Rail: The Fast Track to Economic Development?" The World Bank, July 2010, p. 14.

measure. Here too then, the City compares apples to oranges, obscuring the operating profits generated by HSR operations.

Table 5. Rail accounts

	(€ millions, 1998)			
	France	Germany	Spain	Netherlands
<i>Costs</i>				
Infrastructure costs	4 790	12 621	3 500	1 095
Supplier operating costs	9 998	7 336	2 013	2 339
Accident cost (external)	3	83	19	59
Environmental costs	129	1 403	296	34
Total	14 920	21 443	5 828	3 527
<i>Revenues</i>				
Passenger and freight revenue	7 326	8 614	1 495	1 365
Subsidies for concessionary fares	296	4 244	n.a.	81
Other specific revenues	504			
Fuel tax	35	217	n.a.	n.a.
VAT	280	34	n.a.	n.a.
Total	8 441	13 109	1 495	1 446

Source: OECD 2009

31-514

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. Please refer to Response to Comment 31-510.

31-515

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. To the extent this comment can be construed as a comment on the Partially Revised Draft Program EIR, it must be noted that the first section of the California HST requires over 100 miles of high speed track to test the high-speed trains. The Central Valley is the best location for this initial phase. However, even if the HST Project were not to be fully funded, the American Recovery and Reinvestment Act (ARRA) funding must be used toward a project that has independent utility. The first construction section in the Central Valley can be connected to existing stations in Merced and Madera via a crossover trackway with

the BNSF railroad even if no other portion of the HST railway could be constructed.

The Authority acknowledges comments regarding the “independent utility” condition of the ARRA funding awarded to the Authority for construction in the Central Valley. Essentially, this condition required the Authority to plan how it would utilize the ARRA funding to site and construct track that would have utility in the event additional HSR funding is never secured. Independent utility under ARRA would be achieved by allowing non-electrified passenger trains to utilize the first-constructed portion of the Initial Operable Section (IOS). The ARRA grant agreement with the FRA specifically states that such service would not be funded by Proposition 1A or run by the Authority.

31-516

The comment addresses the Draft 2012 Business Plan, rather than the Partially Revised Draft Program EIR. Please refer to Response to Comment 31-510.

31-31

The comment addresses the Authority’s Funding Plan of November 3, 2011, rather than the Partially Revised Draft Program EIR. The comment is further directed to legal definitions of “useable segment” under Proposition 1A and does not address environmental implications of the HST in the Bay Area to Central Valley study region. Please refer to the Authority’s Revised 2012 Business Plan for further information.

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012)

City of Palo Alto
Office of the Mayor and City Council

February 16, 2012

John Mason
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: City of Palo Alto Comment Letter on the Bay Area to Central Valley High-Speed Train Partially Revised Draft Program Environmental Impact Report

Dear Mr. Mason:

The City of Palo Alto (City) respectfully submits the attached comments regarding the Bay Area to Central Valley High-Speed Train Partially Revised Draft Program EIR (Revised Draft Program EIR). The City would like to highlight three general themes that are covered throughout the City's comment letter.

40-254

Blended 2-Track System vs. 4-Track System

The California High Speed Rail Authority (CHSRA) has publicly committed to pursuing analysis of a blended, 2-track system within the Caltrain corridor and dropping the pursuit of a 4-track system. However, the current Draft Program EIR continues to address a 4-track system and does not adequately address a blended 2-track system. The City believes that the CHSRA should stop analyzing a system that it does not intend to build, and instead revise the analysis to address a blended 2-track system. Further, the City believes that the CHSRA should review the blended 2-track system by issuing a new Notice of Preparation (NOP) and begin preparation of a new Draft EIR.

40-255

Significant and Unavoidable Impacts

The previous version of the Draft EIR indicated that a majority of the program's potential impacts could be mitigated to a less than significant level. The current Draft Program EIR, however, indicates that some of the impacts that were previously stated to be mitigatable to a less than significant level are now considered to be significant and unavoidable. Insufficient analysis is provided to support these revised conclusions, and insufficient effort has been made to identify mitigations that would reduce these impacts to a less than significant level. The City of Palo Alto is concerned that the CHSRA is essentially capitulating and declaring these impacts to be significant without making a reasonable effort to address how to reduce the severity of these impacts.

40-256

Use of Local Methodology

The CHSRA throughout the various CEQA analyses has consistently neglected to apply local methodology to the analysis of project impacts, particularly in regard to traffic and noise impacts. The CHSRA needs to apply local methodology to the analysis of project impacts; omission of this methodology often undercuts the severity of various project impacts.

Thank you for your time and consideration and we look forward to your written response.

Sincerely,

Yiaway Yeh
Mayor, City of Palo Alto

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- c: Palo Alto City Council
- Palo Alto City Manager
- US Secretary of Transportation Ray LaHood
- US Senator Barbara Boxer
- US Senator Dianne Feinstein
- US Congresswoman Anna Eshoo
- US Congressman John Mica
- California Governor Jerry Brown
- California Senator Joe Simitian
- California Senator Alan Lowenthal
- California Senator Mark DeSaulnier
- California Assemblymember Rich Gordon
- California Assemblymember Bonnie Lowenthal
- CHSRA Board Chairperson Dan Richard
- CHSRA CEO Roelof van Ark

Attachment

- Comments on the Bay Area to Central Valley HST Partially Revised Draft Program EIR

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

COMMENTS ON THE BAY AREA TO CENTRAL VALLEY HIGH-SPEED TRAIN PARTIALLY REVISED DRAFT PROGRAM EIR

1. INTRODUCTION

The City of Palo Alto (City) requests that the California High Speed Rail Authority (CHSRA or Authority) to address deficiencies in the Partially Revised Draft Program EIR for the Bay Area to Central Valley High-Speed Train (Draft Program EIR). The City believes that the Authority has failed pursuant to the California Environmental Quality Act (CEQA) to adequately address the potential impacts of the proposed project. The City also continues to believe that inadequate and biased information is provided in the analysis of alternative alignments, and that insufficient data are provided to support the Authority's determination of the environmentally superior alternative.

Comments on the Draft Program EIR are presented in this report by chapter. General comments are provided as are page and paragraph specific comments. This report also identifies several comments from the City's review of previous documents that are still applicable and have not been adequately addressed.

2. COMMENTS ON PARTIALLY REVISED DRAFT PROGRAM EIR

2.1 INTRODUCTION AND SUMMARY

General Comments

- a) The City maintains that many issues beyond those identified in the recent Atherton 1 and Atherton 2 court cases were not adequately addressed in the 2010 Bay Area to Central Valley High-Speed Train Revised Final Program EIR. An EIR cannot be certified in parts - the document must be certified as a whole. Since there is currently no certified EIR for this project, the City rejects the notion that comments must be focused solely on the contents of the current Draft Program EIR. However, for the sake of clarity, the majority of the comments in Section 2 of this letter are focused on the contents of the current Draft Program EIR, while the comments in Section 3 address all of the CEQA documents prepared to date for this segment of the HSR project.
b) The issuance of the Draft Program EIR was premature, as the writ for the Sacramento Superior Court ruling on the Atherton 1 and Atherton 2 cases was not filed until February 13, 2012. The release date of the Draft Program EIR does not provide sufficient time for the public to compare the contents of the Draft Program EIR with the writ in order to confirm that the Draft Program EIR addresses all of the items in the Sacramento Superior Court's ruling.

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40-260

- c) Development of the Draft EIR/EIS for the San Jose to Merced section of the HST project has also been prematurely begun by the CHSRA. This Draft EIR/EIS builds off of the premature conclusion that the Pacheco Pass alignment within the Caltrain corridor is the environmentally superior alternative. Work on the Draft EIR/EIS for the Bay Area to Central Valley portion of the HST project should either be halted until an adequate alternatives analysis is provided for the Bay Area portion of the HST project, or expanded to evaluate various Bay Area to Central Valley options, including use of the various Altamont Pass and Pacheco Pass alignment options.
d) The City of Palo Alto appreciates that Section 5.1.3 of the Draft Program EIR begins to address a "blended system" approach that would involve using Caltrain's existing 2-track system to accommodate HST trains. Inclusion of a 2-track system has been requested by the City of Palo Alto and a number of other commenters, including several members of the California Assembly and State Senate. The Draft Program EIR describes this blended system as only an interim phase, however, with eventual build out to the 4-track system that was originally proposed by the CHSRA. The City of Palo Alto requests that the 2-track blended system be considered as its own separate alternative in the EIR, with no future expansion to a 4-track system. The City proposes that if future track expansion is considered by the CHSRA, it would be covered under a separate future CEQA analysis.
e) The CHSRA has claimed in the past that it is required to pursue analysis of a 4-track option due to the language in the approved 2008 Proposition 1A, and that it must continue to analyze the 4-track option unless and until the CHSRA receives a ruling from the Attorney General that the scope of the EIR can be reduced to a 2-track system. The public was told several months ago that a ruling was to be provided to the CHSRA in an expeditious manner. Has the CHSRA received a ruling regarding whether a 4-track system must continue to be considered in the EIR? If a ruling has been rendered, then the City of Palo Alto requests a copy of that ruling. The CHSRA has stated that it intends to pursue a blended, 2-track system in the Caltrain corridor, and the continued analysis of a 4-track system contradicts the claims made publicly by the CHSRA that the 4-track system is no longer under consideration. The City of Palo Alto requests that the 4-track system be dropped from further analysis in accordance with the public statements made by CHSRA.
f) Section 5 of the Draft Program EIR acknowledges that the blended system approach would have reduced air pollution and energy savings benefits, and that the full benefits would not be realized until some future date when the full 4-track system might be implemented. The City of Palo Alto believes that some quantification of these lower benefits is necessary in order to compare the blended system alternative with the No Project alternative and other alignment alternatives.
g) In the Draft 2012 Business Plan, released in November 2011, the CHSRA indicated that it is unlikely that sufficient funds are available for a 4-track system within the Caltrain alignment, and that a 2-track system would therefore be considered in future analyses.

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

40-260

The Draft Program EIR, however, continues to address a 4-track system, and only addresses a 2-track system as an interim system that would eventually be expanded into a 4-track system. The Draft Program EIR needs to provide an analysis of a permanent 2-track system in the Caltrain alignment, at the same level of detail as the analysis provided for a 4-track system. The City of Palo Alto requests that the 4-track system be dropped from further analysis in accordance with the public statements made by CHSRA.

40-261

- h) The alternatives analysis included in the Draft Program EIR continues to discount the Altamont Pass alignment options without adequate justification. The Draft Program EIR (and the Ridership Study included in previous iterations of the EIR) presents a 4-track system within the Caltrain corridor, and indicates that this system would have a greater ridership capacity than any of the Altamont Pass options. The Draft 2012 Business Plan, however, indicates that a 2-track system within the Caltrain corridor will be carried forward for further analysis, yet no analysis of the ridership capacity of this 2-track system is included in any of the CEQA documents to date. An analysis of the ridership capacity of a 2-track system is required in order to adequately compare the 2-track system with the Altamont Pass alignment options.
- i) The discussions of a phased implementation appears to assume that only the San Jose to San Francisco segment of the Caltrain corridor allows for a phased or blended approach. The Draft Program EIR does not consider other phased options, such as the terminus of an Altamont Pass HSR alignment at the Livermore BART station, which would allow HSR passengers to transfer to a BART train and continue to Oakland or San Francisco. With the current plans to extend BART on the East Bay to San Jose, all three major Bay Area cities would be accessible by this alternative blended system. The Draft Program EIR needs to be revised to address alternative phased and blended implementation plans. Failure to address these additional feasible alternatives prevents an adequate comparison of project alternatives, and prevents the determination of the environmentally superior alternative.
- j) The alignment options that utilize the entire length of the Caltrain corridor would have greater environmental impacts on the Peninsula communities than any of the Altamont Pass alignments, which would use only some or none of the Caltrain corridor. The City of Palo Alto also believes that the full Caltrain corridor option may have negative environmental impacts on a larger number of communities overall than the various Altamont Pass alignment options. The Draft Program EIR needs to be revised to adequately analyze and compare the environmental impacts on communities of the various alternative alignments.
- k) The Pacheco Pass and Caltrain corridor alignments are consistently described and analyzed in significantly greater detail than the Altamont Pass alignments in both the Draft Program EIR and the previous CEQA documents produced by the CHSRA. All viable alignment options should be analyzed and described in the same level of detail in order to determine which alignment option is the environmentally superior alternative.

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40-264

- None of the environmental documents prepared to date provide sufficient analyses to adequately compare the various alignment alternatives and determine which is the environmentally superior alternative.
- l) The technical data to support the Draft Program EIR's conclusions regarding noise, vibration, and traffic impacts were not included with the Draft Program EIR. Public access to this supporting technical data is required in order for the public to adequately determine whether valid conclusions are reached in the Draft Program EIR. The CHSRA needs to make this technical data available to the public, and must restart the 45-day comment period for the Draft Program EIR based on the date that such data is made publicly available.
 - m) The City of Palo Alto received the supporting technical data for the traffic analyses on Friday, February 3, 2011, but to date has not received the supporting technical data for the noise or vibration analyses. Public access to this data is necessary in order to adequately review the Draft Program EIR.
 - n) Earlier CEQA analyses prepared by the CHSRA had greater depth of discussion on issues such as noise and vibration impacts than the analyses included in the current Draft Program EIR. The CHSRA has continued gathering data and conducting studies on the various Bay Area to Central Valley alignment options, and therefore, presumably possesses more information for these analyses than was available for earlier iterations of the CEQA documents. The Draft Program EIR should be revised to include the additional studies and data collection since the previous iterations of the document rather than just referring to old analyses. More detail is necessary to adequately compare the various alignment alternatives and to determine which is the environmentally superior alternative.
 - o) The Draft Program EIR does not address the potential impacts of the use of eminent domain and impacts to land use, population and housing, etc., to acquire additional right-of-way for the project. Actions such as creating grade separations at intersections and expanding the existing Caltrain corridor beyond the current 2-track system would require the taking of additional land, including both private property (such as residences near intersections) and public property (such as one or more lanes of Alma Street). The City estimates that over 100 residences would need to be acquired through eminent domain just to create grade separations in Palo Alto (under a 4-track system with the tracks maintained at grade). An adequate comparison of alignment alternatives cannot be performed without additional information about the extent and impacts of eminent domain on the various environmental parameters.
 - p) The City of Palo Alto strongly believes that enough information is currently available for the CHSRA to develop a project-level EIR for the segment of the HST project from the Bay Area to the Central Valley. The City believes that the CHSRA should drop the current program-level approach, and instead prepare a project-level analysis of all of the alignment alternatives is necessary in order to adequately compare the alternatives and establish the environmentally superior alternative.

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

40-265 | q) The Draft Program EIR does not adequately address project impacts on surface streets, particularly in regard to proposed lane closures on Alma Street. The analysis does not adequately address impacts at existing railroad crossings or impacts of the displacement of Alma Street traffic to surface streets east of the Caltrain alignment, including Middlefield Road.

Specific Comments

40-266 | a) Page 1-5, Table 1-1. It appears that some of the conclusions regarding the significance of various impacts have changed from those provided in the previous CEQA document, but those changes are not called out in the text or in the table. The Draft Program EIR needs to indicate which environmental impact conclusions have changed, and why.

40-267 | b) Page 1-5, Table 1-1. The City disagrees with several of the significance conclusions in this table. In particular, the City disagrees that the significant vibration impacts, traffic impacts from potential lane loss on the Peninsula, and adverse impacts from grade separation are all unavoidable. These significance conclusions differ from those in the previous CEQA document, which showed that different vertical track alignments produced different significance conclusions for many potential impacts. The conclusions in the Draft Program EIR appear to be based on certain assumptions for the type of vertical alignment of the tracks, when in fact a number of vertical options exist, including tunnel, covered trench, open trench, at grade, elevated berm, and aerial. For example, if the train tracks are in a tunnel or in a partially or completely covered trench, then the potential loss of traffic lanes on the Peninsula could be avoided, and traffic impacts from lane loss would be mitigated. This option is even presented in the Draft Program EIR in Section 3.4. Similar vertical alignment options exist that would potentially mitigate the impacts of vibration and grade separation to a less than significant level.

c) Page 1-5, Table 1-1. The City disagrees that the noise impacts from both project operation and construction can be said to be less than significant with implementation of mitigation with the limited level of detail provided in the noise mitigation. The Draft Program EIR does not adequately address the effectiveness of the noise mitigation methods outlined in the document, and therefore cannot accurately conclude that these mitigation methods will succeed in reducing noise impacts to a less than significant level. The City believes that noise impacts should be considered significant and unavoidable until a project-level analysis of noise impacts and mitigation strategies can be performed. See comments on Chapter 2: Noise for further detail.

d) Page 1-5, Table 1-1. The City also disagrees with the less-than-significant conclusion regarding the project's noise impacts, as the Draft Program EIR does not differentiate between the noise impacts for the various possible vertical track alignments. Tracks placed in a tunnel would have far lower noise impacts than tracks placed at grade, while tracks elevated on a berm or aerial tracks would likely have the greatest noise impacts, as the elevated tracks would allow noise to propagate over greater distances. The City

40-267 | would once again like to voice its strong opposition to any sort of elevated tracks in the City of Palo Alto.

2.2 NOISE AND VIBRATION

General Comments

40-268 | a) The previous CEQA document contained a faulty noise analysis, and it is not clear if the errors in the previous analysis have been corrected for the analysis contained in the current Draft Program EIR. As outlined in the comments submitted by CAARD on April 26, 2010 (see Attachment A), the previous noise analysis was faulty on several levels:

- The noise analysis contained incorrect baseline data, such as the number of schools and hospitals along the route. The noise evaluation was faulty.
- The noise tables contained a listing of the acres of parkland along the project route, but the noise metric formula did not have a factor for parkland.
- The results of the noise analysis were incorrectly recorded. When the various data were inserted into the noise metric formula, the resulting noise impact factor was far higher than the conclusions reached in the text of the previous EIR.

Without the detailed noise data to accompany the Draft Program EIR, there is no way to confirm whether these analysis errors from the previous EIR have been corrected, and whether the current noise analysis is likewise inaccurate. This data must be made publicly available, and the 45-day public comment period set to start on the date that this additional information is made available.

40-269 | b) Construction impacts are not addressed in this section. It is understood that the impacts are addressed in Section 4; however, the construction noise impacts would more appropriately be addressed alongside other noise impacts. Noise standards for construction and calculations of construction noise against policies and standards are not presented. See comments on Chapter 4.

40-270 | c) The impact analysis for noise uses a radius of 375 feet off of track centerline based on the FTA Guidance Manual. The radius of noise impacts is not a static number, and therefore several homes and sensitive receptors beyond the 375-foot radius will likely be impacted by noise. The radius of impacts will likely vary along any proposed alignment due to physical characteristics such as topography, type and intensity of development, and existing traffic and land use patterns. The radius of noise impacts will also vary according to the type of vertical track alignment employed.

40-271 | d) Previous iterations of the EIR have omitted sensitive receptors on the proposed Caltrain route. The City of Palo Alto requests that the CHSRA provide an updated and corrected list of the sensitive receptors in the current Draft Program EIR to confirm that the noise and vibration analyses have been updated to cover all sensitive receptors that would be affected by the project.

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

- 40-272 e) Noise and vibration analyses have not been provided for the various route alternatives, which prevents an adequate comparison of the impacts of the project alternatives, and prevents the determination of the environmentally superior alternative.
- 40-273 f) Even at the program level, much more detail should be presented in the mitigation measures. The detail provided is inadequate to assess whether the mitigation is feasible and implementable and whether it would be effective in reducing impacts to less than significant levels as indicated in the conclusions.
- 40-274 g) Mitigation measures should first attempt to address noise and vibration impacts by reducing noise and vibration at the source and within the rail right-of-way. Noise and vibration reducing measures in the surrounding neighborhoods should only be applied if all feasible onsite mitigation measures fail to reduce impacts to a less than significant level.
- 40-275 h) Each mitigation measure should provide performance standards and evaluation criteria for the determination of its applicability to the project-level analysis to aid in determining when the measures should be applied.
- 40-276 i) An evaluation of how much each mitigation measure can reduce the noise level compared with standards needs to be presented.
- 40-277 j) The mitigation measures presented are very general and limited. Other mitigation measures to reduce potential impacts should be addressed.
- 40-278 k) Mitigation measures such as installing double- or triple-paned windows in residences and other sensitive receptors do not address outdoor noise impacts. The City is concerned that project noise impacts may render normal conversation and outdoor activities impossible within the yards of nearby residences. More information on all proposed, feasible noise mitigation measures is required in order to assess the severity of noise impacts on sensitive receptors and to adequately compare the various alignment alternatives.
- 40-279 l) The traffic analysis discusses mitigation to site the corridors above or below grade, while the noise analysis appears to be limited only to an at-grade alignment. Siting the corridor above grade could have additional noise impacts, while siting the corridor below grade could reduce noise impacts.
- 40-280 m) The noise generated by freight train operations in the Union Pacific Railroad (UPRR) corridor should be described in more detail and quantified in order to understand how mitigation would reduce such noise. The supporting data and analyses used to reach the significance conclusions in the Draft Program EIR need to be made available to the public, and the comment period restarted from the date such information is made publicly available.
- 40-281 n) The City disagrees with the conclusion that noise impacts would be less than significant with implementation of mitigation measures. The feasibility of the measures is questionable at best, no performance standards are identified for the application of the measures at the project level, and the amount of noise attenuation afforded by the

- 40-281 measures is not described. Without more detailed information, noise impacts are likely significant and unavoidable at the program level of analysis. Due to the identification of a new significant impact, the Draft Program EIR should be revised and recirculated for public review in accordance with CEQA Guidelines §15088.5.
- 40-282 o) It appears that the impact ratings of several noise and vibration impacts have been increased from medium to high, but it is not possible to tell from the insufficient data supplied in the Draft Program EIR which impact ratings have been changed, and why. Inclusion of a table similar to Table 3.4-A from the previous EIR would be beneficial in establishing what changes to impact ratings have occurred since the last EIR. An analysis should also be included in the Draft Program EIR explaining why these noise impact ratings have changed.

Specific Comments

- 40-283 a) Page 2-5, paragraph 4 – The methodology for the determination of the change in noise level for freight trains moved closer to sensitive receptors needs to be disclosed. What assumptions were made and how was the noise level calculated? What mitigation strategies were considered? Would a below-grade track option (tunnel, covered trench, or open trench) help mitigate these noise impacts?
- 40-284 b) Page 2-9, paragraph 4 – Noise barriers are listed as a way to mitigate noise impacts caused by the relocation of Monterey Highway vehicle traffic, as well as noise created by the HST project. The document should also indicate that noise barriers (such as sound walls and other high profile barrier options) may result in visual impacts and an assessment of those visual impacts needs to be provided.
- 40-285 c) Page 2-9, paragraph 8 – The document concludes that the identified mitigation strategies would reduce noise impacts from the shifting of Monterey Highway and from the shifting of freight train traffic closer to adjacent land uses to a less than significant level. This conclusion is not supported by any evidence. It is premature and inappropriate for this programmatic document to conclude that all project-related noise impacts can be reduced to a less than significant level. The document should conclude conservatively (as it has done for many other potential impacts) that noise impacts may continue to be significant even with mitigation. The project-level analysis is where conclusions about impact significance should be reached. See General Comments 3 and 7.

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

2.3 TRAFFIC, TRANSIT, CIRCULATION, AND PARKING IMPACT ANALYSIS

GENERAL COMMENTS

Traffic Impacts on Business Operations

40-286

- a) The Partially Revised Draft Program EIR for the Bay Area to Central Valley High-Speed Train project discusses the need for lane reductions in the City of Palo Alto as part of the project:
 - One traffic lane eliminated on Alma Street between Homer Avenue and Embarcadero Road
 - Two traffic lanes eliminated on Alma Street between Embarcadero Road and California Avenue

As part of the Draft Program EIR evaluation, the following six intersections were further analyzed to determine existing Level of Service (LOS) operations and estimate LOS impacts by the project under Existing, Existing + Project, Future (2035) No Project, and Future + Project conditions:

- El Camino Real (Northbound Ramps) and University Avenue
- El Camino Real (Southbound Ramps) and Palm Drive
- El Camino Real and Embarcadero Road
- El Camino Real and Page Mill Road
- Alma Street and Homer Avenue
- Alma Street and Churchill Avenue

Alma Street becomes Central Expressway at San Antonio Road, the border between the City of Palo Alto and the City of Mountain View. The Draft Program EIR also discusses the need for lane reductions in the City of Mountain View on Central Expressway between San Antonio Road and Rengstorff Avenue.

The City of Palo Alto is concerned with any potential lane reductions on Alma Street and Central Expressway, as lane reductions may lead to significant delays in roadway operations due to a loss of roadway capacity and degradation of intersection LOS, both of which can lead to impacts to the quality of life of adjacent residential neighborhoods due to traffic intrusion and impacts to the economic engine of the City.

40-287

Business operations in the City of Palo Alto may be negatively affected during construction staging activities and permanent high speed rail operations, and these negative impacts may have regionally significant consequences. Major businesses and business centers in Palo Alto that could be negatively impacted by the project include:

- The Stanford Research Park, including companies such as Hewlett-Packard, VMware, and Tesla Motor Company

40-287

- The Downtown Palo Alto core, including companies such as Palantir and Jive Software
 - Other major companies adjacent to the Alma Street corridor such as America Online and Groupon
- b) The City of Palo Alto believes that the Partially Revised Draft Program EIR needs to address the business operation impacts of the traffic impacts and disruptions that would be caused by the HST project.

Traffic Impact Analysis and LOS Methodologies

- a) Alma Street is a north-south arterial through the City of Palo Alto that maintains a fairly consistent roadway configuration with two lanes for each travel direction. Only six east-west crossings across Alma Street exist due to conflicts with the existing Caltrain/Union Pacific Railroad corridor. These east-west crossings include:
 - University Avenue (undercrossing)
 - Embarcadero Road (undercrossing)
 - Churchill Avenue (at-grade)
 - Oregon Expressway (undercrossing)
 - East Meadow Drive (at-grade)
 - Charleston Road (at-grade)

Loop ramps facilitate intersecting movements at University Avenue and Oregon Expressway, and select left-turn storage lanes provide crossing opportunities at Churchill Avenue, East Meadow Drive, and Charleston Road.

40-288

The City of Palo Alto is a member agency of the Valley Transportation Authority (VTA) Congestion Management Program (CMP). Each member agency of the VTA has adopted the Traffic Impact Analysis (TIA) and LOS methodologies of the VTA CMP. Specifically, when analyzing LOS impacts at signalized intersections, the VTA methodologies require analysis of both AM and PM commute periods. The Draft Program EIR only evaluates a PM commute period scenario. The omission of an AM commute period analysis is a significant deficiency in the Draft Program EIR requiring additional analysis and recirculation with appropriate data. The lack of an AM commute period analysis dismisses a significant amount of traffic generated by local and regional businesses as well as school commute traffic from Palo Alto High School, located immediately adjacent to the Alma Street and Churchill Avenue intersection. The Alma Street and Churchill Avenue intersection sees some of the highest bicycle and pedestrian volume activity in the City, and the Draft Program EIR fails to consider those movements.

40-289

In addition, the Draft Program EIR includes a focused discussion of lane reductions on Monterey Highway in San Jose, but there is no similar analysis for lane reductions on Alma Street in Palo Alto or Central Expressway through the City of Mountain View. The lack of a similar lane reduction analysis provides inconsistencies in the traffic analysis

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

40-289

methodologies of the Draft Program EIR and the Authority's evaluation of significant impacts of the overall project. As a member agency of the VTA, the City of Palo Alto believes that the evaluation of traffic impacts in Palo Alto should be analyzed under the same consistent methodology as any other city within the County of Santa Clara, and that the VTA CMP guidelines need to be used as the standard for the evaluation of project impacts.

40-290

Lack of AM Peak Hour LOS Analysis

- a) The LOS Standards of the City and the VTA focus on a measurement of delay in seconds to drivers. Table 1 provides a definition of Signalized Intersection LOS operations and impact language and grades.

Table 1
Signalized Intersection LOS Based on Delay

Level of Service	Description	Avg. Control Delay per Vehicle (Sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to a very low vehicle delay.	10.0 or Less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with Los A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	20.1 to 30.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high V/C ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, which occurs when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	Greater than 80.0

High-Speed Train Partially Revised Draft Program EIR Review

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40-529

When analyzing impacts from lane reductions on a roadway at critical signalized intersections, the use of delay as a measurement tool is most effective in estimating true impacts from a project and for allowing identification of reasonable mitigation.

40-291

The City of Palo Alto's definition of a significant impact at a signalized intersection is when the LOS is degraded to a LOS E or grater, or when the delay added to an intersection exceeds 10-seconds. As the City of Palo Alto is a member of the VTA CMP, any intersections analyzed in the City of Palo Alto should be measured against the LOS criteria in Table 1 for both the AM and PM commute periods. Such an analysis would better define the potential impact periods of the project when the most normal traffic patterns occur; Tables 3-1 and 3-2 of the Draft Program EIR, however, only examine the PM commute period of the day. The City of Palo Alto believes that the omission of the AM commute period from the analysis is a significant shortcoming of the Draft Program EIR.

40-292

At the Alma Street and Churchill Avenue intersection, for example, the PM-only analysis of the Draft Program EIR fails to analyze potentially significant impacts that result from the Palo Alto High School (PALY) morning commute. The Alma Street and Churchill Avenue intersection is located immediately adjacent to PALY and provides direct access the school's south parking lot. The Alma Street and Churchill Avenue intersection also experiences higher than normal bicycle and pedestrian activity during the AM peak hour with approximately 400 bicycles alone traveling across the intersection during the AM peak hour. These morning bicycle and pedestrian movements are also not considered at all within the Draft Program EIR, as the AM commute condition was not evaluated. The lack of an AM peak hour analysis is inconsistent with the City of Palo Alto and Valley Transportation Authority (VTA) – Traffic Impact Analysis (TIA) guidelines.

40-293

City of Palo Alto Not Contacted to Solicit Input on Potential Lane Reductions

- a) The City of Palo Alto was not contacted to solicit input on study intersections in relation to potential lane reduction impacts and feasible mitigation. This failure to solicit input from the City of Palo Alto may be a violation of both the California Environmental Quality Act (CEQA) and the National Environmental Quality Act (NEPA).

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Panorama Environmental, Inc.

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Draft Program EIR Uses Flawed Intersection LOS Data

- 40-294 a) Table 2 provides a comparison of the signalized intersection LOS data used by the Draft Program EIR with the signalized intersection LOS data gathered by the City of Palo Alto. The City of Palo Alto's database system uses an industry standard measurement based on the 2000 Highway Capacity Manual (HCM 2000) and the VTA TIA guidelines.
- 40-295 b) As Table 2 shows, the data used in the Draft Program EIR is substantially inconsistent with existing vehicle volumes and data that is easily available from Palo Alto's database, and suggests that the signalized intersection LOS data in the Draft Program EIR is flawed and inaccurate. The Draft Program EIR data shows the signalized intersection LOS in most cases to be better than existing field conditions. The discrepancy on baseline signalized intersection LOS further calls into question the signalized intersection LOS findings in the Draft Program EIR for the Existing + Project, Future (2035) No Project, and Future + Project conditions. The City of Palo Alto believes that this discrepancy in signalized intersection LOS data results in an underestimation of the potential traffic impacts of the project.

Table 2
Draft Program EIR – Existing Signalized Intersection LOS Conditions
Versus Actual Field Conditions

Study Intersection	Draft Program EIR		City of Palo Alto		City of Palo Alto	
	Existing Conditions		Field Conditions		Field Conditions	
	Finding		Existing (AM)		Existing (PM)	
	LOS	Delay (Sec)	LOS	Delay (Sec)	LOS	Delay (Sec)
University Avenue and El Camino Real (NB)	C+	21.2	C	22.3	C	28.5
Palm Drive and El Camino Real (SB)	C	24.4	C	22.6	C	24.7
Homer Avenue and Alma Street	B+	11.4	A	8.9	B	12.2
Embarcadero Road and El Camino Real	D	48.7	D	38.9	D	41.4
Churchill Avenue and Alma Street	C	25.0	D	37.1	D	47.3
Page Mill Road and El Camino Real	D	49.1	D	49.7	D	48.5

40-296 Table 2 shows, for example, that the existing delay at the Alma Street and Churchill Avenue intersection is almost twice as long according to City of Palo Alto data as the Draft Program EIR data. Using the City of Palo Alto data for existing signalized intersection LOS for the Existing + Project, Future, and Future + Project year scenarios results in a degradation of that intersection to an unacceptable LOS F.

40-296 Vertical separation of the train tracks and Alma Street, with Alma Street maintained at grade and the train tracks placed below grade in a tunnel or a covered trench, would eliminate the need to reduce the lane width of Alma Street while still allowing for the widening of the Caltrain corridor right of way.

Failure to Analyze Intersections

40-297 a) Several intersections that are immediately adjacent to at grade crossings were not included in the analysis for impacts to traffic patterns at these intersections. Some of these intersections, such as the intersection of Alma Street and Charleston Road, currently operate at or below LOS E. The following intersections should be analyzed as part of the Draft Program EIR and future Project EIR:

- El Camino Real and Churchill Avenue - (Signalized)
- El Camino Real and Serra Street-Park Boulevard - (Signalized)
- El Camino Real and Stanford Avenue - (Signalized)
- El Camino Real and California Avenue - (Signalized)
- El Camino Real and Cambridge Avenue - (Signalized)
- El Camino Real and Charleston Road-Arastradero Road - (Signalized)
- Alma Street and Embarcadero Road (North) - (Unsignalized)
- Alma Street and Embarcadero Road (South) - (Unsignalized)
- Alma Street and Oregon Expressway (North) - (Unsignalized)
- Alma Street and Oregon Expressway (South) - (Unsignalized)
- Alma Street and Loma Verde - (Unsignalized)
- Alma Street and Alma Commons - (Signal Currently Under Construction)
- Alma Street and East Meadow Drive - (Signalized)
- Alma Street and Charleston Road - (Signalized)
- Middlefield Road and Charleston Rd - (Signalized)
- Middlefield Road and San Antonio Road - (Signalized)

b) Analysis of these intersections should also take into close consideration the traffic and traffic safety impacts to pedestrian and bicycle activity through the intersections resulting from potential lane reductions.

Roadway Segment LOS Based on V/C Ratio

40-298 a) Section 3.2.D of the Draft Program EIR uses V/C ratios to evaluate roadway capacity affected by lane reductions, and uses LOS for intersection analysis. Section 3.3.B of the Draft Program EIR provides a more detailed analysis of V/C

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40-298

impacts of the Monterey Highway segment where a 6-lane to 4-lane reduction is being considered. No such detailed V/C analysis is provided for the proposed lane reductions elsewhere along the Peninsula, including the Alma Street lane reductions in Palo Alto. Instead, Section 3.4 of the Draft Program EIR jumps directly into a "Tool Kit of Solutions" to help reduce the impact of potential lane reductions along the San Francisco Peninsula, without first providing a sufficient analysis of the potential impacts.

40-299

The HCM 2000 provides a recommended Volume to Capacity (V/C) LOS and ratio analysis methodology that would be appropriate for the evaluation of proposed lane reductions along Alma Street. Table 3 provides a summary of the HCM 2000 recommended V/C ratios.

Table 3

HCM 2000 – Recommended Roadway Segment LOS Based on Volume-to-Capacity Ratio

Level of Service	Description	Avg. Control Delay per Vehicle (Sec.)
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	Less than 0.269
B	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	0.270 – 0.439
C	Speeds at or near the free-flow speed of the roadway prevail. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more vigilance on the part of the driver.	0.440 – 0.639
D	Speeds begin to decline slightly within increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	0.640 – 0.849
E	At this level, the roadway operates at or near capacity. Operations in this level are volatile because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	0.850 – 0.999
F	Vehicular flow breakdowns occur. Large queues form behind breakdown points.	1.000 and greater

40-300

Given the limited amount of east-west crossing opportunities along Alma Street and the regional use of Alma Street as a parallel route to El Camino Real (State Route 82), a more detailed V/C analysis evaluating the potential impacts of lane reductions is justified.

40-301

Alma Street at the Churchill Avenue intersection, for example, experiences an Average Daily Traffic (ADT) volume of 27,000 vehicles per day. Each approach on Alma Street facilitates over 1,000 vehicles per hour under existing conditions for several hours during a typical weekday, creating consistently high volume peak periods beyond traditional normal peak hour conditions. The City peak periods range from 9:00 AM to noon, and from 4:00 PM to 8:00 PM.

To provide an understanding of how any proposed lane reductions on Alma Street may impact the City, Table 4 was prepared to measure potential lane reduction impacts near the Churchill Avenue intersection based solely on existing traffic volumes. Table 4 shows that any proposed lane reductions on Alma Street would result in unacceptable LOS E or F operations on the corridor for a majority of the day, which the City of Palo Alto would classify as a significant impact. In this case, these significant traffic impacts would clearly have potentially highly negative impact to the community, to the quality of life of adjacent residents, and to the region because of Palo Alto's influence on the economic vitality of the greater San Francisco Bay Area.

The significant impact on Alma Street, a region-serving arterial, would further degrade and exacerbate LOS operations at intersections along the corridor, and would extend well beyond the commute peak hour periods. As previously discussed within this comment letter, the Draft Program EIR fails to adequately analyze traffic impacts on Alma Street and its intersecting streets within the City of Palo Alto during varying times of the day. Table 4 further demonstrates that impacts from a proposed lane reduction would extend farther beyond the standard peak hour analysis.

Similar impacts from proposed lane reductions on Alma Street would likely be experienced near the City's other east-west crossings at East Meadow Drive and Charleston Road.

Any lane reduction considered on Alma Street would severely impact traffic movements and should not be considered.

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40-301

Table 4
Preliminary Volume-to-Capacity Ratio Analysis of Lane Reductions on Alma Street

Alma Street Segment at Churchill Avenue	Time	Volume	Existing 4-Lane		Proposed 2-Lane	
			V/C*	LOS	V/C*	LOS
Alma Street Southbound	8AM-9AM	450	0.23	A	0.45	C
	9AM-10AM	810	0.41	B	0.81	D
	10AM-11AM	715	0.36	B	0.72	D
	11AM-12PM	522	0.26	A	0.52	C
	12PM-1PM	658	0.33	B	0.66	D
	1PM-2PM	651	0.33	B	0.65	D
	2PM-3PM	647	0.32	B	0.65	D
	3PM-4PM	825	0.41	B	0.83	D
	4PM-5PM	1,048	0.52	C	1.05	F
	5PM-6PM	1,394	0.70	D	1.39	F
	6PM-7PM	1,496	0.75	D	1.50	F
	7PM-8PM	1,427	0.71	D	1.43	F
	8PM-9PM	967	0.48	C	0.97	E
Alma Street Northbound	8AM-9AM	1,259	0.63	C	1.26	F
	9AM-10AM	1,551	0.78	D	1.55	F
	10AM-11AM	1,383	0.69	D	1.38	F
	11AM-12PM	892	0.45	C	0.89	E
	12PM-1PM	751	0.38	B	0.75	D
	1PM-2PM	723	0.36	B	0.72	D
	2PM-3PM	769	0.38	B	0.77	D
	3PM-4PM	809	0.40	B	0.81	D
	4PM-5PM	900	0.45	C	0.90	E
	5PM-6PM	1,026	0.51	C	1.03	F
	6PM-7PM	1,282	0.64	D	1.28	F
	7PM-8PM	1,309	0.65	D	1.31	F
	8PM-9PM	710	0.36	B	0.71	D

*Capacity based on 1,000 vehicles per hour per lane

40-302

Left Turn Storage Impacts from Lane Reductions

- a) Queue impacts from left turn lanes at intersections where lane reductions are considered should be included within the traffic impact analysis of the Draft Project EIR. These left turn queuing impacts need to be analyzed to determine the delays and effects on roadway operations that may not be captured through a V/C analysis.
- b) The City of Palo Alto experiences high left turn traffic volumes at intersections adjacent to grade crossings due to the limited number east-west corridors across the rail corridor. Reducing the number of through lanes could significantly impact queue lengths and queuing potential for left turn movements.

40-303

Neighborhood Intrusion from Alma Street Lane Reductions

- a) Lane reductions along Alma Street would result in traffic diversions and potential neighborhood intrusions. The level of impact should be analyzed based on the *Traffic Infusion on Residential Environments (TIRE)* Index, which provides a numerical representation of residents' perceptions of the effect of traffic on residential activities such as walking, cycling and playing. The City of Palo Alto considers a project to result in a potentially significant traffic impact if the change in traffic results in a 0.1 or greater change in the TIRE Index. The neighborhoods of concern for potential intrusion include:

- University South
- Old Palo Alto
- Downtown North
- Midtown
- Fairmeadow
- Greenmeadow

Additional Transportation Concerns

- a) The following additional transportation concerns require analysis or discussion within the Draft Program EIR and future Project EIR updates:
 - The traffic model used needs more explanation regarding how it works and the assumptions used in it, so that the reader can evaluate its applicability and better understand the impacts identified from its use.
 - The section should address the potential traffic hazards to bicycle use, pedestrians, and traffic from the reduction in traffic lanes, including the potential for increased accidents.
 - The section should address the potential traffic hazards of the project, particularly the loss of one or more lanes on Alma Street, on Palo Alto's "Safe Routes to Schools" program.

40-304

40-305

40-306

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- 40-307 • The section and mitigation includes the potential removal of parking; however, socioeconomic impacts to businesses from the loss of parking could be significant and needs to be addressed.
- 40-308 • Sources of information to substantiate several assertions need to be provided. See Specific Comments, below.
- 40-309 • The year 2035 scenario addresses the fact that the baseline condition will result in significant traffic impacts and reductions of level of service, without the High Speed Train project. The impacts of the narrowing of the Monterey Highway on traffic are assessed against the baseline condition. While this approach may be allowable under CEQA, it should be noted that the narrowing of lanes may preclude future projects necessary to adjust the capacity of the highway to accommodate growth.
- 40-310 b) The Draft Program EIR does not indicate what level of cumulative traffic analysis has been performed for the project. Known and anticipated projects must be added to any cumulative traffic analysis performed for the HST project. A partial list of the upcoming projects in and around the City of Palo Alto is provided below. Please contact the City of Palo Alto for additional information on these projects.
 - Stanford University Medical Center
 - Facebook (City of Menlo Park)
 - VMware
 - Mitchell Park Library
 - 101 Lytton
 - Minh's building on Embarcadero/East Bayshore
 - Alma Plaza
 - Stanford Campus and Stanford Housing Improvements
 - Summerhill Homes (multiple projects)
 - San Antonio Shopping Center (City of Mountain View)
 - Residential project at the former Mayfield Mall location at San Antonio Road/Nita (City of Mountain View)
- 40-311 c) The CHSRA has previously stated that it would only consider a mid-Peninsula HST station in communities that express support for such a station. The City of Palo Alto has stated in previous comment letters that it is opposed to an HST station in Palo Alto.
- 40-312 d) If an HST station is considered in Palo Alto, then traffic impacts (including potential lane reductions) on the northern segment of Alma Street must also be analyzed. The Draft Program EIR fails to provide such an analysis.
- e) The Draft Program EIR does not address the traffic and parking impacts if an HST station stop is constructed in Palo Alto. The parking needs for such a station, and location for such parking, needs to be addressed.

- 40-313 f) The Draft Program EIR does not address weekend traffic in the City of Palo Alto, and the impacts of lane closures on Alma Street on this traffic. Locations such as shopping centers and events such as sporting events on the Stanford University campus generate a substantial amount of weekend traffic in Palo Alto, and this traffic would be disrupted by the loss of one or more lanes on Alma Street. Weekend traffic impacts need to be analyzed in the EIR in order to adequately compare the various alignment alternatives.
- 40-314 g) The Draft Program EIR does not address weekday traffic impacts during non-peak hours. The City of Palo Alto experiences altered vehicular, bicycle, and pedestrian traffic patterns during the hours where students are going to and from the various schools in the City. The project's traffic impacts, particularly the loss of one or more lanes of Alma Street, could significantly disrupt traffic and create traffic hazards during these non-peak hours.
- 40-315 h) The intersection of Churchill Avenue and Alma Street has altered signalization timing between 7:45 AM and 8:30 AM. This altered signalization is designed to allow improved traffic flow for students arriving to school. During this time period, the left lane on Alma Street northbound becomes backed up for several blocks, as this lane fills with vehicles waiting to turn left onto Churchill Avenue. If one of the two northbound lanes on Alma Street was lost as a result of the HST project, then northbound traffic movements on Alma Street between 7:45 AM and 8:30 AM would be severely affected. This potential traffic impact is not addressed in the Draft Program EIR.
- 40-316 i) The Draft Program EIR makes the erroneous assumption that the loss of one or more lanes of Alma Street would force the majority of the displaced traffic onto El Camino Real. In reality, many motorists already use the residential streets east of the Caltrain alignment as a cut through route due to traffic congestion on Alma Street. It would be reasonable to assume that a portion of the displaced traffic would use the residential streets to the east of the Caltrain alignment rather than cross the train tracks to access El Camino Real to the west. The Draft Program EIR traffic analysis needs to be revised to analyze the effects of increased cut through traffic in the residential neighborhoods east of the Caltrain alignment.
- 40-317 j) The Draft Program EIR fails to adequately address project construction impacts on traffic, particularly the construction impacts on the loss of one or more lanes of Alma Street. The Draft Program EIR does not indicate whether project construction may result in the temporary closure of all lanes of Alma Street, and the effects that such a street closure would have on traffic. The Draft Program EIR also fails to address the traffic impacts of temporary road closures at the various track crossings during construction of grade separations. The alignment

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40-317 alternatives cannot be adequately compared without a sufficient understanding of the traffic impacts of both project construction and operation.

40-318 k) The Draft Program EIR fails to address the traffic hazards for bicyclists that would be created due to the loss of one or more lanes of Alma Street. Bicyclists on Alma Street currently share the lane with vehicular traffic in both the northbound and southbound directions. The current lane configuration of Alma Street allows for the safe passing of bicyclists by motorists. The loss of one or more lanes of Alma Street, however, would force motorists into oncoming traffic in order to pass bicyclists. Such a lane closure would create a hazardous traffic situation that is not addressed in the Draft Program EIR.

40-319 l) The Draft Program EIR fails to address both construction and operation project impacts to the Special-Use Stanford Stadium Caltrain Station located at Alma Street and Embarcadero Road. The Special-Use Stanford Stadium Caltrain Station is in operation during Stanford football games, special Stanford events that generate high Caltrain ridership such as Parent Day, and as a critical stop when the region applies for major sporting events such as the Olympics and World Cup soccer events. If the HST project proposes to maintain access to the Stanford Station, then the Draft Program EIR needs to address what upgrades would be required for this station (including a new station platform and station access), and how the use of this station would factor into the combined Caltrain/HST train schedule. If the HST project proposed to remove the Stanford Station, then the Draft Program EIR needs to address the increase in vehicular traffic that would result from the loss of the rail transit option, as well as the negative impact on the Bay Area economy if Stanford University no longer hosts special events and sporting events on its campus. The Draft Program EIR's omission of the project's potentially significant impacts on the Special-Use Stanford Stadium Caltrain Station should result in a redreculation of the DEIR.

Specific Comments

40-320 a) Page 3-2, Section 3.1-B, Paragraph 1 -- Explain in understandable terms how the Santa Clara Valley Travel Demand Model (VTA Model) works.

40-321 b) Page 3-4, Paragraph 1 -- Hazards should be addressed in the bulleted list of potential significant impacts from the road narrowing.

40-322 c) Page 3-4, Paragraph 2 -- The paragraph states that the affected environment presented in the 2008 Final Program EIR remains accurate and unchanged. Have the traffic volume and traffic counts changed over the last four years?

40-323 d) Page 3-6, Paragraph 4 -- The source of information should be provided for the assertion that PM peak conditions are generally more impacted than AM peak hour conditions.

40-324 e) Page 3-15, Paragraph 5 -- The paragraph states that travelers will shift routes to the highways, which are already operating under congested conditions, including US 101, I-

40-324 280, SR-87, and SR-85. Additional information on the LOS on these highways and the predicted changes in LOS should be provided in the paragraph.

40-325 f) Page 3-16, Paragraph 2 -- The source of information should be provided to support the assertion that motorists shift their time of day travel to utilize available roadway capacity or avoid congested segments.

40-326 g) Page 3-17, last paragraph -- The vertical alignment of the rail corridor on an aerial structure is presented as mitigation; however, the construction impacts of a raised corridor are not addressed and neither are the increased noise impacts or visual impacts from operation of a raised structure. These impacts should be addressed.

40-327 h) Page 3-18, first paragraph, last bullet -- Reduction of on-street parking could have socio-economic impacts to businesses that need to be addressed.

40-328 i) Page 3-18, last paragraph -- We do not agree that the mitigation strategies presented in the section could be expected to substantially avoid or lessen impacts to less than significant levels in most circumstances. More evidence needs to be presented on the feasibility of these measures and the quantification of reduction in impacts before this conclusion can be made.

2.4 CONSTRUCTION

General Comments

40-329 a) Construction impacts should be presented with the general project impacts by resource area. The analysis in the construction section does not provide enough detail to adequately address impacts and does not demonstrate that impacts would be reduced to less than significant levels.

b) Construction noise impacts would likely be significant and unavoidable. The analysis does not provide quantification of impacts or enough detail to demonstrate that mitigation would reduce impacts to less than significant levels.

Specific Comments

40-330 a) Page 4-4, 5th paragraph, 1st bullet -- The discussion of impacts of traffic lane closure for lane narrowing needs a more detailed description of impacts. What would be the change in LOS? What sorts of traffic hazards may occur as a result of construction?

40-331 b) Page 4-4, 5th paragraph, 2nd bullet -- Some level of quantification of air impacts from construction is typical and appropriate, even at a program level. Emissions for similar types of construction are known or can and should be calculated.

40-332 c) Page 4-4, 5th paragraph, 3rd bullet -- The description states that noise would be the same as discussed generally in Chapter 3.4 of the 2008 Final EIR. However, the construction would be closer to sensitive receptors and therefore would likely be greater. The closer proximity of construction to sensitive receptors should be addressed and quantified. Page 4-15 -- The list of mitigation strategies for noise and vibration construction impacts should include the use of "state-of-the-art" construction equipment, materials, and

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40-332 abatement techniques to achieve the greatest feasible reduction in noise and vibration impacts. The same wording should apply to operational noise and vibration impacts as well.

d) Page 4-15 – The list of mitigation strategies for noise and vibration should also include measures to include a complaint hotline to receive and respond to residents’ concerns regarding noise, vibration, and light disturbances. The measure should also include resident notification prior to construction.

40-333 e) Page 4-18, first paragraph and first list of bulleted items – Without a detailed, project-level analysis, it is premature and inappropriate to conclude that the efficacy of identified mitigation strategies would reduce certain impacts to a less than significant level. Each of these resource categories should be considered to have significant and potentially unavoidable impacts at the program level of analysis. Refinement of the level of impacts after mitigation should occur during the project-level analysis.

40-334 f) Page 4-18, second and third paragraphs – The second list of bulleted items includes the resources for which sufficient information is not currently available to conclude the significance level of impacts post mitigation. However, the final paragraph inappropriately truncates this list. For example, biological resources are listed in the bulleted list, but the final paragraph only mentions possible impacts to wildlife movement corridors. Other biological resource impacts, such as loss of habitat and impacts to special status species, could also result from the project and should not be excluded from the list of potentially significant impacts. The document should conclude conservatively that the broad range of impacts listed in the bulleted list may continue to be significant even with mitigation. Conclusions about impact significance should be reached in the project-level analysis.

2.5 NEW INFORMATION AND CHANGED CONDITIONS SINCE THE SEPTEMBER 2, 2010, PRIOR DECISIONS

Specific Comments

40-335 a) Page 5-4, paragraphs 2 and 3, and page 5-9, first paragraph – The City of Palo Alto understands that the concept of a “blended system approach” is in the early stages of design. The City looks forward to seeing the eventual details of this blended system approach, particularly in regard to grade separations, right-of-way and eminent domain requirements, and other possible system upgrades and changes that will be necessary to implement a blended approach. As stated at the beginning of this comment letter, however, the City would like to see the 2-track blended system considered as its own alternative, without a future expansion to a 4-track system. The City would also like to see both Pacheco Pass and Altamont Pass alternatives analyzed where the HST system terminates at Oakland or San Jose, and then existing systems (such as Caltrain or BART) take HST passengers the remainder of the distance to San Francisco. The City believes that one of these alternatives may be a viable option for meeting the goals of the CHSRA

40-335 while minimizing the environmental impacts of the project, particularly on the communities of the Peninsula.

40-336 b) Page 5-9, last paragraph – The fourth sentence in this paragraph should read, “These impacts include the need for real property, displacement of existing land uses, impacts on biological, hydrological, and parks resources, visual effects, the potential for impacts to cultural resources or public utilities, potential hazardous materials effects, as well as traffic, air quality, and noise and vibration effects.”

2.6 PARTIALLY REVISED DRAFT PROGRAM EIR AND RECOMMENDATIONS OF A PREFERRED NETWORK ALTERNATIVE FOR CONNECTING THE BAY AREA TO THE CENTRAL VALLEY

General Comments

40-337 a) The City of Palo Alto would disagree that the impacts of project phasing or of implementing a blended system alternative are not distinguishable between the Altamont Pass and Pacheco Pass options. Impacts for the Altamont Pass alternatives would depend on how the rail line enters the Bay Area, and whether it terminates in San Jose or travels across the Dumbarton.

40-338 b) Were the traffic and ridership impacts of the Livermore BART extension considered in determining ridership numbers for both the Altamont Pass and Pacheco Pass options?

Specific Comments

40-339 a) Page 6-2, third bullet – Use of the Caltrain corridor should not be a criterion for selection of the preferred network alternative. A more appropriate selection criterion would be use of existing rail corridors, without identifying specific corridors.

40-340 b) Page 6-2, fourth bullet – The Pacheco Pass option is also strongly opposed by various Bay Area cities, agencies, and organizations. Similarly, the Altamont Pass option is both strongly supported and strongly opposed by various Bay Area cities, agencies, and organizations. This criterion appears to be inappropriate for use in selecting a preferred network alternative.

40-341 c) Page 6-2, sixth bullet – The last sentence indicates that both noise and vibration impacts from the potential movement of freight operations closer to adjacent land uses would be potentially significant. This conclusion contradicts the statement on page 4-18, where the document indicates that noise impacts would be reduced to a less than significant level through mitigation. The appropriate conclusion in this programmatic document should be that noise impacts may continue to be significant even with mitigation. Conclusions about the efficacy of noise mitigation strategies should not be rendered until the project-level analysis is performed.

40-342 d) Pages 6-7 and 6-23 – The City of Brisbane is not included in the list of PCC cities.

40-343 e) Page 6-9 -- The Draft Program EIR calls attention to the conditions requested by the Tri-Valley PAC and Representative Costa, but does not provide the conditions requested

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40-343 | by Senator Simitian, Assembly Member Gordon, and Representative Eshoo. These latter
 40-344 | three individuals have all requested conditions for a blended system alternative, and
 these conditions should be included in the Draft Program EIR.

f) Page 6-22, items 4 and 5 – The City of Palo Alto disagrees that the Pacheco Pass
 alignment is still supported by the Bay Area region, and that the Pacheco Pass alignment
 has the fewest impacts to communities because it makes the best use of available rail and
 transportation rights of way. The City of Palo Alto supports an Altamont Pass
 alternative over a Pacheco Pass alignment, and believes that insufficient evidence has
 been shown to indicate that the Pacheco Pass alignment has fewer impacts to
 communities than the Altamont Pass alignment options.

3. COMMENTS FROM PREVIOUS DOCUMENT REVIEWS THAT ARE STILL NOT ADEQUATELY ADDRESSED

3.1 PREVIOUS COMMENT LETTERS

40-345 | The City of Palo Alto has submitted comment letters on previous iterations of CEQA and NEPA
 environmental documents related to the project. These comments letters include the following:

- April 23, 2010 comment letter regarding the March 2010 Bay Area to Central Valley High-Speed Train Revised Draft Program EIR Material
- June 30, 2010 comment letter regarding the April 2010 Preliminary Alternatives Analysis Report for the San Francisco to San Jose Section of the California High-Speed Train Project
- September 1, 2010 comment letter regarding the Final Bay Area to Central Valley High-Speed Train Revised Final Program EIR
- January 25, 2012 letter requesting an extension on the Draft Program EIR review period

The City of Palo Alto believes that all of the comments submitted in these previous letters are still valid, and is including all four comments letters as Attachment B. Some of the comments contained in these previous comment letters apply to the contents of the current Draft Program EIR. These relevant comments are hereby contained in this letter via reference. However, since the City believes that all aspects of the EIR (including previous iterations of the CEQA documents) are still open to comment, the entire text of the previous comment letters are attached to this letter.

3.2 APRIL 23, 2010 COMMENTS

40-346 | The following comments from the April 23, 2010 City of Palo Alto comment letter are hereby
 incorporated into this letter via reference. Where appropriate, the comment has been expanded
 to better address the current Draft Program EIR.

40-347 | Comment A.2-1

40-348 | Comment A.2-3

40-349 | Comment A.2-4 – The Draft Program EIR expands upon the analysis of Monterey Highway
 impacts, but does not adequately address these potential impacts.

40-350 | Comment A.2-5

40-351 | Comment A.2-6

40-352 | Comment A.3-1 – The flawed fundamental assumptions and underpinnings of the analysis lead
 the City of Palo Alto to once again urge that the CHSRA reopen the analysis of alternative
 routes, including the Altamont Pass options.

40-353 | Comment A.4-1

40-354 | Comment B.1-7

40-355 | Comment B.1-10

40-356 | Comment B.1-11

40-357 | Comment B.2-9

40-358 | Comment C.1-2

40-359 | Comment C.1-5

40-360 | Comment C.1-7

40-361 | Comments C.5-1 and C.5-2 – The Draft Program EIR concludes that length of alignments and
 acreage of wetland, floodplain, stream, and water body impacts were used to determine the
 environmentally superior alternative, but the Draft Program EIR fails to justify why one acre of
 wetlands in one location is equivalent to one acre elsewhere. Values must be given to the areas
 that would be affected to better determine the severity of project impacts.

40-362 | Comment C.5-3

40-363 | Comment C.5-4

40-364 | Comment C.5-5

40-365 | Comment C.6-1

40-366 | Comment C.11-2

40-367 | Comment C.11-3

40-368 | Comment C.11-5

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

40-369 | Comments C.13-1 and C.13-2 – In addition to the other types of sensitive receptors listed in Comment C.13-1, the City of Palo Alto believes that residences need to be considered sensitive receptors as well. The Draft Program EIR is not clear regarding whether the noise and vibration impact analysis includes residential uses as sensitive receptors.

40-370 | Comment C.13-3

40-371 | Comment C.13-5

40-372 | Comment C.13-6

40-373 | Comment C.13-10 – This comment is also relevant to the discussion of freight train traffic on either the inside or the outside tracks in a four-track configuration.

40-374 | Comment C.13-14

40-375 | Comment C.13-16

40-376 | Comment C.13-17

40-377 | Comment C.13-20

40-378 | Comment C.15-1

40-379 | Comment C.16-1

40-380 | Comment C.17-5

40-381 | Comment C.17-6 – This comment is particularly relevant to the analysis of potential lane closures, such as those being considered for Alma Street in Palo Alto.

40-382 | Comment C.17-7 – This comment is particularly relevant to any proposed station in the City of Palo Alto.

40-383 | Comment C.17-8

40-384 | Comment C.17-9

40-385 | Comment C.17-10

40-386 | Comment C.17-11

40-387 | Comment C.17-13

40-388 | Comment D-3 – The sixth bullet point is particularly relevant to the route alternatives that do not include a station in the City of Oakland.

40-389 | Comment D-6

40-390 | Comment D-7

40-391 | Comment D-8

40-392 | 3.3 JUNE 30, 2010 COMMENTS
The following comments from the June 30, 2010 City of Palo Alto comment letter are hereby incorporated into this letter via reference. Where appropriate, the comment has been expanded to better address the current Draft Program EIR.

40-393 | Comment A. Introductory Comments – The City of Palo Alto continues to believe that alternative alignments other than the Caltrain right-of-way remain viable options that should be evaluated further by the CHSRA. The 15 guiding principles included at the end of Comment A continue to be the principles that the City of Palo Alto is using to evaluate the HSR project.

40-394 | Comment C.1-10

40-395 | Comment C.1-13

40-396 | Comment C.5-1

40-397 | Comment C.5-2

40-398 | Comment C.5-12

40-399 | Comment C.5-13

40-400 | Comment C.5-42

40-401 | Comment C.5-43

40-402 | Comment C.5-46

40-403 | Comment C.7-2

40-404 | Comment C.7-6

40-405 | Comment C.7-7

40-406 | Comment C.8-3

40-407 | Comment C.8-4

40-408 | Comment C.8-18

40-409 | Comment C.8-19

40-410 | Comment C.8-21 – The historic nature of many of the residential neighborhoods in Palo Alto that would be affected by the HST project may preclude the use of certain mitigation methods, such as installation of sound-reducing windows or other physical alterations.

Submission 40 (Yiaway Yeh, City of Palo Alto, February 17, 2012) - Continued

3.4 SEPTEMBER 1, 2010 COMMENTS

- 40-411 | The following comments from the September 1, 2010 City of Palo Alto comment letter are hereby incorporated into this letter via reference. Where appropriate, the comment has been expanded to better address the current Draft Program EIR.
- 40-412 | Standard Comment 9 – The City of Palo Alto continues to urge the CHSRA to evaluate alignment alternatives outside of the Caltrain right of way, particularly in light of Union Pacific Railroad’s continued opposition to shared use of its right-of-way for high-speed trains.
- 40-413 | Comment L003-51
- 40-414 | Comment L003-53
- 40-415 | Comment L003-69
- 40-416 | Comment L003-111
- 40-417 | Comment L003-140 – This comment is particularly relevant to the discussion of noise impacts in the Draft Program EIR.

Response to Submission 40 (Yiaway Yeh, City of Palo Alto, February 24, 2012)

40-254

The Authority acknowledges Palo Alto's comment regarding analysis of a blended system for the Caltrain Corridor. Please refer to Standard Response 1 for a discussion of the blended system and phased implementation, as well as an explanation for why it is consistent with CEQA to maintain analysis of a four-track system for the Caltrain Corridor in this Program EIR.

40-255

New potential significant and unavoidable impacts have been identified for traffic and circulation, vibration, connecting commuter rail services, construction effects, and grade separation effects, based on the additional analysis in this document. The Authority has made every effort to develop mitigation strategies for consideration and adoption at the program level, which will be refined and applied as part of second-tier, project-level EIRs. In some instances, in the judgment of the analysts preparing the impact analysis, the ability of mitigation strategies to reduce impacts to a less than significant level was unclear. More detailed analysis at the second tier may result in a conclusion that impacts are fully mitigated based on more detailed mitigation measures. Please refer to Standard Response 3 regarding the level of analysis and mitigation provided as being consistent with a program EIR.

40-256

At the program level of analysis for a statewide project, local methodology and impact criteria are not used as different municipalities employ differing approaches and thresholds of significance. An analysis employing these local standards would not result in a consistent analysis where it would be possible to compare between alternatives that travel through different cities. Therefore, this analysis uses guidance provided by federal agencies, including FHWA guidance for motor vehicle noise, and FTA and FRA guidance for rail operations noise, to conduct a consistent analysis for a regional or statewide project such as the HST.

It would be impossible to consistently evaluate the project's impacts using the methodologies of each city that the alternatives pass through as many local noise ordinances and guidelines use different methodology, or are out of date. Instead, the federal lead agencies for the HST project (FRA and FTA) have provided guidance for how to consistently evaluate noise and vibration impacts using a screening methodology, which is the approach undertaken in this 2012 Partially Revised Draft Program EIR and previous program-level documents. The FRA and FTA guidance does not suggest that local criteria should be used. Noise and vibration limits during construction will be established by the Authority, which will consider the land use activities adjoining the construction sites. These criteria will be developed with consideration to local noise ordinances that limit the hours or noise levels of construction.

40-257

The Authority does not agree with the comment that the analysis in the Program EIR is inadequate or biased.

The rationale for identifying the Pacheco Pass network alternative serving San Francisco via San Jose as the environmentally superior alternative is discussed in Chapter 6. The Superior Court in the Atherton 1 litigation specifically concluded as follows: "The Court finds that the FPEIR studied a reasonable range of alternatives and presented a fair and unbiased analysis." The Atherton 1 ruling from 2009 is available on the Authority's website for the Partially Revised Draft/Final Program EIR.

40-258

The scope of the January 2012 Partially Revised Draft Program EIR is identified in Chapter 1 of the January 2012 Partially Revised Draft Program EIR. The requirement of the court rulings to revise and recirculate portions of the program EIR does 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)). The 2012 Partially Revised Draft Program EIR therefore contains the revised information and analysis to address the issues that the Court identified in its ruling, as well as an assessment of new information since September 2010. The final court judgment did not require the Authority to revise and recirculate the entire 2008 Final Program EIR or to start the CEQA process from scratch.

Regarding the Authority’s duty to respond to comments under CEQA, the Authority has followed the direction in CEQA Guidelines Section 15088.5(f)(2). This provision indicates that, where a lead agency is revising and recirculating only a portion of an EIR, “the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR.” The provision further indicates that the lead agency need respond only to those comments received during the recirculation period that relate to the portions of the EIR that were revised and recirculated. Following this CEQA Guideline section, the Authority’s responses to comments address all the comments received that pertain to the 2012 Partially Revised Draft Program EIR. In addition, the Authority has gone beyond the minimum requirements by providing responses to comments on all significant environmental issues raised in the comments.

The timing of the release of the January 2012 Partially Revised Draft Program EIR was appropriate. The Sacramento Superior Court issued a ruling in both the Atherton 1 and Atherton 2 cases on November 10, 2011. The rulings, and the scope of the January 2012 Partially Revised Draft Program EIR, are addressed in Chapter 1 of the January 2012 Partially Revised Draft Program EIR. The public review period for the January 2012 Partially Revised Draft Program EIR was from January 6, 2012, to February 21, 2012, a period of 47 days. The formal filing of the writ for the Sacramento Superior Court ruling on February 13 did not affect the public’s ability to review the November 10, 2011 rulings and compare the contents of the January

2012 Partially Revised Draft Program EIR. Refer to Standard Response 2 regarding the Authority’s compliance with CEQA’s procedural requirements.

The rationale for identifying Pacheco Pass as the environmentally superior alternative is discussed in Chapter 6 of the January 2012 Partially Revised Draft Program EIR.

The Authority disagrees that the development of the San Jose to Merced Section Draft EIR/EIS was premature. As described on Section 1.5 of this Program EIR, in the process of responding to the Atherton 1 and Atherton 2 litigation the court has not required the Authority to halt the second-tier project-level environmental studies for the Bay Area to Central Valley second-tier project sections, which includes the San Jose to Merced section. However, in the event that the Board chooses a different network alternative and/or preferred alignments than those which have previously been selected, it may be necessary to make an adjustment to the San Jose to Merced Section project-level environmental work currently underway or to halt it entirely. Work on the San Jose to Merced section remains preliminary. No second-tier Draft EIR/EIS document has been released. Please refer to Standard Response 2 regarding the Authority’s compliance with CEQA’s procedural requirements.

40-260

The Authority acknowledges Palo Alto’s request that the blended system be treated as its own alternative in the EIR, without any future expansion. Please refer to Standard Response 1 for an explanation of why a blended system is not its own alternative at the first tier, program EIR stage. Standard Response 1 also provides an explanation for why it is consistent with CEQA to maintain the discussion of a four-track HST system for the Caltrain Corridor. The Authority has not received input from the Office of the Attorney General to date on its request for advice related to Proposition 1A. Please refer to Standard Response 1 for an explanation of why a continued discussion of a four-track system for the Caltrain Corridor is appropriate at the program level of analysis, but would not constrain the Authority from focusing any second-tier EIR on a blended system approach.

Chapter 5 of the Partially Revised Final Program EIR provides an amplified discussion of the environmental consequences of a blended system approach between San Francisco and San Jose, including both reduction of adverse impacts and reduction of project benefits. See Section 5.1.3C for further details. For any network alternative that would utilize the San Francisco to San Jose alignment, these differences in consequences would be the same. This information provides a sufficient basis for a first-tier decision on a network alternative.

40-261

The Authority does not agree with the comment that the Program EIR discounts Altamont Pass network alternatives. The 2008 Final Program EIR presented a total of eleven representative network alternatives that would utilize the Altamont Pass. Of these eleven, five network alternatives would utilize the Caltrain Corridor between San Francisco and San Jose in whole or in part. Please refer to Chapter 7 of the 2008 Final Program EIR, Figures 7.2-1, 7.2-3, 7.2-5, 7.2-8, and 7.2-9. The impacts analysis in the 2008 Final Program, as supplemented by the 2010 Revised Final Program EIR and the 2012 Partially Revised Final Program EIR has identified that both Pacheco Pass and Altamont Pass network alternatives that utilize the Caltrain Corridor would have impacts on communities. The Authority does not agree with the comment that impacts along Altamont Pass network alternatives would have fewer effects on communities. As discussed in Chapter 6, while the preferred Pacheco Pass Network Alternative would also have construction issues and logistical constraints, particularly on the Caltrain Corridor, these issues are comparatively less than through the Tri-Valley and Alameda County because of the existing, publicly owned commuter rail right-of-way and tracks that Caltrain and the HST would share.

The Authority notes that the current 2012 Partially Revised Draft Program EIR and the 2010 Revised Final Program EIR provided a greater emphasis on impacts analysis for certain alignments based on the outcome of litigation that the City of Palo Alto participated in. The Authority believes that all alignments and network alternatives have been subjected to an equal level of analysis and consideration in the Program EIR process.

With regard to the comment that a phased or blended system approach would be possible at the future, planned Livermore BART station, it would be possible to implement phased implementation of an Altamont Pass Alternative to an intermodal station in Livermore. From Livermore to the Bay Area, however, a blended system approach would not be implementable because HST is not compatible with BART, and cannot run on BART tracks. There would therefore be no steel rail tracks for HST to blend for it to reach the major Bay Area city destinations of San Jose, Oakland, and San Francisco from Livermore station.

40-262

Technical memoranda for traffic and noise and vibration analyses that are the basis of the information for the Partially Revised Draft Program EIR were listed in the references chapter (Chapter 9) and were available upon request. As the comment indicates, the City of Palo Alto requested and received the traffic technical memoranda and supporting traffic model outputs. The noise analysis was not requested by the City of Palo Alto.

The Authority believes that the analysis of impacts of the first-tier project has been adequately examined. The purpose of the 2012 Partially Revised Draft Program EIR was to specifically address additional issues identified by the court in the Atherton CEQA lawsuits, and additional study of these specific issues is included.

As the comment (letter n) indicates, project-level work was started for the San Francisco to San Jose Segment but was put on hold in May of 2011, before any analysis was completed. Nevertheless, to fully document all possible traffic impacts associated with lane closures, an AM peak hour analysis was completed and is incorporated into Chapter 3 of the Partially Revised Final Program EIR. This AM peak hour analysis shows that during the AM peak hour a significant traffic impact is found at one location that did not have significant traffic impacts during the PM peak hour: Churchill Avenue and Alma Street. Evaluating the corridor as a whole at the first-tier, there continues to be a significant traffic congestion impact for the San Francisco to San Jose Corridor as described in the Partially Revised Draft Program EIR. No new significant impact has been

identified and recirculation is not required. Please also refer to Standard Response 3 regarding the appropriate level of detail in a program-level analysis.

40-263

Refer to Chapter 3.2.2 of the 2010 Revised Final Program EIR where the potential property impacts of a widened Caltrain Corridor were discussed. The ranking of property impacts for the San Francisco to San Jose Corridor were increased due to the need for additional right-of-way. Also refer to Chapter 5.3 in the 2012 Partially Revised Draft Program EIR where the potential for property impacts was identified for grade separations. More detail at the project-level will be required to identify specific property impacts of grade separations. The information presented in the 2008, 2010, and 2012 environmental documents provides adequate detail at the program level for comparison of alignment alternatives and network alternatives.

40-264

The Authority and FRA previously decided to use a tiered environmental review process and prepared the 2005 Statewide Program EIR/EIS, and the 2008 Bay Area to Central Valley Program EIR/EIS. This first tier of environmental review makes only programmatic decisions about the general location of alignments and stations, while site-specific environmental impacts related to planned improvements and facilities will be evaluated in subsequent project-level environmental documents. The Authority has intentionally tailored the scope of this programmatic analysis to the conceptual nature of the proposed decisions, consistent with the concept of tiering in CEQA. The Authority believes that the general level of detail in the impacts analysis and the general nature of the mitigation strategies are appropriate for the broad decisions to be made based on the Partially Revised Final Program EIR. The Program EIR process does not purport to be able to identify all of the detailed impacts of each alignment or station location option but rather focuses on identifying and describing key differences in potential impacts for each of the alternatives. More detailed analyses will be provided in future project-level environmental documents. Project-level work has been started for the San Francisco to San

Jose and for the San Jose to Merced Sections, although work for the San Francisco to San Jose Section was put on hold in May 2011.

40-265

As proposed, the four-track shared use corridor would be a grade separated system, thereby removing all existing rail crossings. Implementation of grade separation and the associated effect on traffic is addressed as part of the traffic modeling in the program-level analysis but will be more comprehensively evaluated in project-level environmental documents.

Because of the presence of a fully developed urban environment with an extensive grid network of streets, it is likely that traffic from streets with proposed lane closures will be diverted to several parallel roadways. However for the Partially Revised Draft Program EIR, the traffic was assumed to shift to the nearest arterial roadway to provide the most conservative estimation of potential impacts. In the case of the potential Alma Street closure, the nearest arterial is El Camino Real. El Camino Real is 515 feet from Alma just north of University, while Middlefield Road is 3360 feet (over half a mile) away. Generally, Middlefield Road operates considerably better than El Camino Real, with only limited intersection congestion, while El Camino has many intersections operating at capacity. Since El Camino Real experiences congestion at several locations, shifting all of the diverted traffic onto this corridor was a conservative approach representing a "worst case scenario" and avoids an under-estimation of possible traffic impacts.

40-266

Table 1-1 of the Partially Revised Draft Program EIR identifies the conclusions of the January 2012 Partially Revised Draft Program EIR. New potential significant and unavoidable impacts have been identified for traffic and circulation, vibration, connecting commuter rail services, construction effects, and grade separation effects. Refer to Chapter 7 of the January 2012 Partially Revised Draft Program EIR for a summary of these specific impacts. Refer to Chapters 2 through 5 for specific information regarding these new impacts.

40-267

The Authority acknowledges Palo Alto's opposition to elevated tracks in the City of Palo Alto. At a program level, appropriate noise and vibration mitigation strategies have been developed consistent with a first-tier, screening level analysis of noise and vibration impacts. These strategies include noise barriers, building sound insulation, and acquisition of noise easements. Elimination of train horn noise by grade separation of both Caltrain and HST would greatly eliminate some existing noise sources, as explained in Chapter 3.4 of the 2008 Final Program EIR. Second-tier environmental documents will examine the specific impacts and benefits of implementing HST on selected alignments, and define any necessary mitigation measures at a more localized scale.

The Authority acknowledges that vertical profile variations, particularly below grade options, may contribute to reducing or eliminating noise impacts of HST. The Authority previously committed to consider vertical profile variations at the second-tier of planning and environmental review. It is anticipated that a similar commitment would be included in any project decisions based on the 2012 Partially Revised Final Program EIR. Chapter 2 is revised to specifically include a statement to this effect.

40-268

The comment indicates that the noise evaluation in the 2010 Revised Program EIR is "faulty." The Authority disagrees with this comment. The noise analysis in the 2008 Final Program EIR was challenged in the first *Atherton 1* case. The 2009 *Atherton 1* court ruling concluded the noise analysis as a whole was adequately detailed and satisfied the requirements of a program EIR. The November 2011 rulings in *Atherton 1* and *Atherton 2* determined that the 2010 Revised Program EIR failed to analyze the potential noise and vibration impacts associated with moving freight closer to existing land uses in a four-track corridor. All other aspects of the 2010 Revised Program EIR's analysis of noise and vibration impacts on the Peninsula were either not challenged in litigation and are presumed adequate, or were determined by the court to comply with CEQA.

The analysis in the Partially Revised Draft Program EIR confirms the findings in the previous CEQA document for operational noise impacts. The following discussion is provided to assist the City in better understanding the program-level noise analysis. For additional information, please refer to Chapter 15 of the 2010 Revised Final Program EIR, which provides a detailed response to the letter from CAARD submitted on that document.

- The "noise metric" accounts for potential impacts (rated High, Medium or Low) to land uses with a high density of sensitive receptors (such as schools) and those with nighttime occupancy (residences and hospitals) as well as those that are particularly sensitive to noise during the day (schools).
- The land use category evaluated in Palo Alto in the 2008 Program EIR and 2010 Revised Program EIR was Category 2, as the data available did not indicate any parkland along the San Francisco to San Jose Corridor and in close proximity to the Caltrain right-of-way that rises to that level of sensitivity as Category 1 use. As indicated in the 2005 FRA Manual, if a park is set aside for "serenity and quiet" it qualifies as a Category 1 land use. If it contains uses such as an outdoor amphitheater or concert pavilion, or contains National Historic Landmarks with significant outdoor use, then it is treated as being as a Category 2 land use, the same category that into which residences fall. General park use is categorized under Category 3, as it is sensitive to noise but is not considered as sensitive as other receptors in that most parks allow and have recreational activity (sports, dogs) that often creates noise. Table 3-1 in the 2005 FRA Manual provides thresholds for increases in noise associated with a project that result in various levels of noise impact based on the existing ambient noise. In this context, Category 3 is five decibels (i.e., 5 dBA) less sensitive than Category 1 and 2. Consequently a screening distance to address general use parks could be as little as 65 feet where buildings shield the tracks or 95 feet where there are no intervening buildings, much less than the 375 feet that was used in the analysis. Therefore, the noise metric used in the 2008 Program EIR is conservative in its estimation of impacts and consistent with the screening methodology.

The noise technical memorandum is listed in the references chapter (Chapter 9) of the Partially Revised Draft Program EIR. The City did submit a request for the traffic technical information and received this information (Refer to Response to Comment 40-262). The Authority received no request for the noise and vibration technical memorandum from the City of Palo Alto.

40-269

As the comment notes, construction impacts were addressed in Chapter 4 of the Partially Revised Draft Program EIR. The first paragraph of Chapter 4 notes that this discussion is *in addition to* the discussion of construction impacts in Chapter 3 of the 2008 Final Program EIR, by resource topic. Construction noise and vibration impacts were addressed in the 2008 Final Program EIR in Chapter 3.4, Noise and Vibration, and briefly in Chapter 3.18, Construction Methods and Impacts. Examples of noise and vibration levels from typical construction activities and equipment were provided in Chapter 3.4. They are intended to give a sense of the typical noise levels that would be involved in construction. Chapter 4 of this document provides similar information and concludes that construction noise impacts can likely be reduced to a level of less than significant with implementation of the mitigation strategies provided on Page 4-15.

FRA and FTA do not have a separate construction noise screening procedure for program-level evaluations but consider that the screening distance adequately captures sensitive receptors that could be adversely affected by construction noise.

Noise standards and the methodology for assessing construction noise impacts at the project level are provided by the FRA and FTA manuals. These will be used in second-tier, project-level EIR/EIS documents once a preferred alignment is selected to determine noise impacts and address specific mitigation measures.

40-270

The screening methodologies in the current FRA (October 2005) and FTA (May 2006) Guidance Manuals (Manual) are very similar and provide specific guidance for program-level analysis. The intent of the screening methodology is to conservatively quantify the number

of potentially impacted sensitive receptors (“upper bound on the potential for impact”) along a corridor. The screening distance provided in both manuals takes into account several factors such as train speed, noise emission characteristics of current train technology, and the nature of the corridor (characterized by typical existing ambient noise levels for different land use patterns).

- The 1998 FRA Guidance Manual did not address HST speeds less than 125 mph, whereas the 1995 FTA Guidance Manual did. The Statewide Programmatic EIR/EIS was published prior to the issuance of the 2005 FRA Manual and the 2006 FTA Guidance Manual and used 375 feet as the screening distance for train speeds up to 125 mph, such as between San Francisco and San Jose and in some areas along Monterey Highway. This screening distance accounts for use of diesel locomotives, which tend to be noisier than current high speed trains. For consistency, the 2008 Final Program EIR used the screening distance (375 feet) from the centerline of the guideway (i.e., alignment) that was used in the 2005 Statewide Programmatic analysis. This data was used in subsequent program EIRs.
- The 2005 FRA Manual indicates three HST speed regimes (Regime I, Regime II, and Regime III) used to characterize in general the noise emission from HST. Speed Regime I is characterized by noise dominated by propulsion and machinery and applies up to a transition speed of 60 mph. Speed Regime II (transition speed of up to 170 mph) noise is due primarily to wheel/rail interactions. In Regime III (greater than 170 mph) aerodynamic noise is dominant. Figure 2-7 in the 2005 FRA Manual indicates that high speed train noise is higher at higher speeds (i.e., the greater the speed the greater the noise).
- The 2005 FRA Manual provides two sets of screening distances for HSTs: one for Regime II and one for Regime III (none for Regime I). The manual indicates that the screening distance for Regime II with steel-wheeled trains in an urban/noisy suburban area next to a railroad corridor where there are intervening buildings is 200 feet as “measured from the centerline of guideway or rail corridor.” The noise screening analyses performed for the 2008 Final Program EIR used 375

feet, which is 175 feet greater than what is recommended in the current FRA Guidance Manual and conservatively captures potentially affected receptors.

40-271

Refer to Response to Comments 40-268 and 40-270. The Authority feels that the noise analysis is conservative and adequately provides an assessment of potential noise impacts for different alternatives. Noise measurements at sensitive receptors were not conducted at the program level, nor required. Refer to Page 3.4-26 of the 2008 Program EIR regarding subsequent project-level analysis. A more detailed noise analysis that identifies and considers impacts on specific sensitive receptors will be provided in the project-level EIR once a preferred alternative has been selected.

40-272

The 2008 and 2010 Program EIR documents provide comparisons of the noise and vibration impacts for each alternative under consideration, consistent with the FRA and FTA manuals. The noise analysis in the Partially Revised Draft Program EIR confirms that noise and vibration impact conclusions are consistent with the analysis in these prior documents. Potential noise and vibration impacts during construction are addressed in Chapter 4 of the Partially Revised Draft Program EIR document. Construction-phase impacts are identified at a programmatic level that would occur regardless of the alignment selected. Please refer to Figure 3.46 in the 2008 Final Program EIR with a comparative graphic for noise impacts.

40-273

Please refer to the Responses to Comments 40-267, 40-275, and Standard Response 3 in this document, all of which addresses the appropriate level of detail in discussing mitigation strategies in a program-level analysis and the potential efficacy of these measures. Sound barriers and building insulation are effective methods of mitigating noise impacts and are identified as appropriate in the federal guidance manuals.

40-274

Comment acknowledged. The 2008 program-level analysis considered mitigation strategies, one of which is minimizing source levels as much as feasible taking into account train technology available at the time of implementation. Additional mitigation measures addressing source reduction may be analyzed during the project-level analysis.

40-275

In the project-level analysis specific mitigation measures will be evaluated and their effectiveness will be based on their ability to reduce impacts. For example the effectiveness of noise walls is determined based on their height and extent at the project level.

Refer to Standard Response 3 regarding the appropriate level of definition of mitigation measures at this programmatic level of analysis.

40-276

Chapter 3.4 of the 2008 Final Program EIR explained in general the effectiveness of certain types of noise mitigation. The FRA Guidance Manual, chapter 5 provides more detailed information about the effectiveness of mitigation measures such as sound barriers, building sound insulation, and acquisition of buffer zones. Sound barriers close to HST vehicles can reduce noise by 6-10 dB, sound barriers at the right of way line 5-8 dB, and building sound insulation 5-15 dB. The effectiveness of noise easements would depend on the particular facts of each case. Please refer to Response to Comments 40-267, 40-275, and Standard Response 3 in this document, all of which addresses the appropriate level of detail in discussing mitigation measures in a program-level analysis and the potential efficacy of these measures.

40-277

For noise and vibration effects at the program-level, FTA and FRA guidelines indicate that a screening analysis is to be used to determine general levels of impact. General mitigation strategies are acceptable to indicate potential mitigation measures that can be later applied during the project-level analysis. A quantitative assessment

of the projected reductions in noise or vibration associated with different mitigation measures will be provided for specific impacts identified during the project-level analysis.

The comment suggests other mitigation strategies should be addressed, but does not identify what strategies the Authority should consider. The Authority believes that it has appropriately identified the generally recognized approaches to noise mitigation, however, it can add mitigation for further consideration as part of second-tier planning and environmental review.

40-278

Noise barriers near to the noise source mitigate outdoor noise. Noise insulation is generally only implemented when the indoor noise levels cannot be adequately mitigated by a feasible height noise wall, such as for residences that have more than one story and are close enough to the alignment not to be fully shielded by a noise wall. These impacts and mitigations are highly location specific and will be addressed in the second-tier, project-level evaluation.

40-279

As the comment notes, some vertical alignments may reduce or increase potential impacts that would be associated with vertical alignments. At this program level of analysis, appropriate noise and vibration mitigation strategies have been developed that are consistent with FTA and FRA guidance for a program-level screening analysis. The FRA and FTA screening analysis guidelines do not distinguish between different vertical alignments.

The project-level analysis will take into account the vertical profile characteristics and options for the alignments selected at the conclusion of this Program EIR process. Please see added text in Chapter 2. Future project-level analysis may evaluate different vertical alignment alternatives and will provide site-specific mitigation measures for the different vertical alignments.

40-280

Refer to Response to Comment 40-283.

The noise technical memorandum is listed in the references chapter (Chapter 9) of the Partially Revised Draft Program EIR. The City did submit a request for the traffic technical information and received this information (refer to Response to Comment 40-262). To our knowledge, there was not a request for the noise and vibration technical memorandum from the City of Palo Alto.

40-281

The text presents mitigation strategies for potential impacts. Once a preferred alignment is selected, the project-level analysis will determine location-specific impacts and, if necessary, specific mitigation measures will be developed to avoid or reduce these impacts. The Authority disagrees that the noise impact would be significant and unavoidable after implementation of the mitigation strategies as identified in Chapter 3.4 of the 2008 Final Program EIR and the 2012 Partially Revised Draft Program EIR. For additional information on the appropriateness of mitigation strategies at the program-level of analysis, please refer to Standard Response 3.

40-282

There were no changes in the noise ratings for the corridor from those shown in the 2010 Program EIR. The Partially Revised Draft Program EIR dealt exclusively with freight noise and vibration and found no change in impact ratings associated with this source.

40-283

A noise technical memorandum was prepared for the 2012 Partially Revised Draft Program EIR and was listed in the references. This technical memorandum is available by request from the Authority; however, no such request was received by the Authority from the City of Palo Alto. The City of Palo Alto did request the traffic technical memorandum, which was provided, as was additional traffic information specific to Palo Alto.

The noise technical analysis memorandum provides an assessment of the potential for additional operational noise impacts related to moving rail freight traffic closer to existing land uses along the corridor. The noise measure (Ldn) used 24-hour equivalent noise level with a 10 dB penalty for nighttime operation accounting for

increased sensitive at night, consistent with FRA (or FTA) guidelines and a common unit of measure used by many of the communities in the corridor. The following summary below is provided as a courtesy to the reader:

- Two cases were analyzed to address the effect of moving freight trains closer to residences and other sensitive receptors in the corridor: freight trains on the inner tracks (where they operate now) and freight on the outer tracks of a four track alignment.
- It was conservatively assumed that all freight activity occurs at night (normally there are two during the day and two at night) and the freight movement was all on one side of the alignment, the side on which noise levels were calculated.
- The difference in Ldn was 0.5 dBA between the two freight scenarios at the closest receptors, which is an imperceptible difference. Therefore, this difference is not likely to result in new adverse effects on homes presently adjoining the rail corridor and would not change the screening distance or the programmatic rating of impact for the corridor. Therefore, noise screening analysis conducted in the 2008 Final Program EIR adequately reflects the level of impact from noise associated with all train activity in the corridor.

For a discussion of different vertical alignments, please refer to the Response to Comment 40-279.

40-284

The Partially Revised Draft Program EIR addresses those topics identified in the final judgment for the *Atherton 1* and *Atherton 2* litigation as requiring corrective work under CEQA. The range of noise mitigation strategies and potential secondary effects from the use of these mitigation strategies were one of those topics.

The design of noise barriers appropriate for the proposed HST would depend on the location of noise-sensitive buildings after Monterey Highway and the freight train tracks have been shifted. More detailed consideration of noise impacts and mitigation measures such as the height of soundwalls or other noise reducing measures will be included in project-level environmental documents.

Secondary effects, such as visual impacts, relating to the use of noise mitigation strategies were considered in the 2008 Final Program EIR, chapter 3.9, at a very broad scale, which is appropriate for this program-level of analysis. The discussion of secondary visual impacts from sound barriers was found adequate in the first *Atherton 1* case. Furthermore, although these program EIRs provide a base from which project-level EIRs may tier from, they do not restrict the type of mitigation measures that may be considered to mitigate impacts. The aesthetic and community effects of sound barriers will be addressed in more detail as part of second-tier project development and environmental review when it will be possible to identify specific locations and size of sound barriers. With respect to Monterey Highway, the corridor already includes many soundwalls and property walls of varying age, condition, and associated landscaping (Kiesling, Memorandum on Existing Sound Barriers/Property Walls along Monterey Highway, 2012). With implementation of the project, these existing walls may be replaced with consideration of maintaining a high level of visual quality in neighborhood areas by implementing such measures as visual buffers, trees, and other landscaping, architectural design, and public artwork as noted in Chapter 3.7 of the 2008 Final Program EIR. Refer to Chapter 7A in the Partially Revised Final Program EIR for an additional mitigation strategy regarding the aesthetic treatments of sound walls, which would apply regardless of location along the HST system, and the shifting of Monterey Highway.

40-285

The noise analysis conducted at the program level shows that the noise level at adjacent noise sensitive land use areas due to the shifting of Monterey Highway or train tracks would increase no more than 1 to 2 dBA. A noise increase of this degree can be reduced to a less-than-significant level by incorporating mitigation strategies such as the construction of soundwalls or increasing the height of replacement property walls. A more detailed noise impact and mitigation analysis will be conducted at the project level to further substantiate these findings.

40-286

The Partially Revised Draft Program EIR identified possible traffic impacts should lane reductions be required on Alma Street based on very preliminary design. At some locations, acceptable levels of traffic congestion at these intersections would become unacceptable with the lane closures unless mitigated.

It is understood that the City has concerns regarding the loss of roadway capacity and the Authority will work to refine the project design to avoid lane closures where feasible. The analysis provided in this Partially Revised Draft Program EIR was completed to identify at a program level potential traffic impacts if lane reductions were to in fact occur. Impacts associated with the loss of lanes will be evaluated in greater detail in the project-level EIR if such lane reductions are determined to be required. This will include a more detailed assessment of traffic impacts during construction and operation of the project that could affect nearby residents and businesses. As part of this project-level analysis secondary impacts associated with changes in traffic patterns will also be evaluated, including loss of access and quality of life issues, such as noise impacts.

40-287

During project construction, localized traffic impacts could occur related to congestion, circulation, and access. During project operation and construction, any traffic that traverses intersections where HST-related congestion could occur, including trips destined for business centers in Palo Alto, could experience additional delay. Chapter 4 of the Partially Revised Draft Program EIR contains information on generalized construction impacts at the programmatic level and Chapter 3 addresses traffic, parking, and circulation, but the analysis does not in general specifically address local vehicular, pedestrian, or other transit access impacts. These impacts will be specifically identified by location in the project-level EIR and specific mitigation measures will developed at this time.

Refer to also the Response to Comment 40-286.

40-288

Traffic volumes are generally higher during the PM peak hour than the AM peak hour and the PM peak hour is usually representative of the highest level of traffic during any period of the day. Since the PM peak hour usually is the highest concentration of traffic it is the best gauge of worst case traffic effects. If an intersection does not experience a significant impact during the PM peak hour it will likely not be impacted during other times periods. However, if a significant impact is encountered during the PM peak hour, an impact may also occur during other time periods. In cases where an adverse traffic effect is projected during one peak hour, the mitigation indicated would also apply to the other peak hour time period as well.

Nevertheless, in response to comments from the City, an AM peak hour analysis was also conducted and has been incorporated into Chapter 3 of the Partially Revised Draft EIR for both existing plus project and 2035 plus project conditions. In Responses to Comments 40-292 and 40-295, updated traffic counts for the intersection of Churchill/Alma were conducted in March 2012 and were incorporated into this analysis for both the AM and PM peak hours. Based on these new counts, the analysis found that the intersection of Churchill/Alma is currently very congested and that LOS is expected worsen in the AM peak hours under both scenarios (Existing plus project, 2035 plus project). This intersection has been added to the list of seven potentially impacted intersections in Chapter 3 (Page 3-7) of the Partially Revised Final Program EIR and there continues to be a significant traffic congestion impact for the San Francisco to San Jose Corridor as described in the Partially Revised Draft Program EIR. However, no new significant impacts or mitigation measures have been identified and recirculation is not required.

40-289

The analysis of the loss of travel lanes on Monterey Highway and on Alma Street were not conducted in the same manner because of the difference in the functionality of the two roadways. The loss of a travel lane on Monterey Highway results in a shift of traffic from that corridor to a parallel facility including US 101, I-280, SR-85 and SR-87. Therefore, traffic was shifted from one corridor to another and the volume to capacity ratio was recalculated with a lesser roadway

width. Although Alma Street carries through traffic it also has the function of providing local access to and from residential areas along the corridor and to and from commercial areas, particularly downtown Palo Alto and the Stanford area. Since traffic was not simply removed from Alma Street and placed on a parallel corridor, instead it was shifted from Alma Street to El Camino Real via turning movements at locations such as Homer, University, Embarcadero, and Page Mill, it was determined that the correct way to analyze traffic impacts for the loss of travel lanes on Alma would be through an intersection delay analysis. As stated on Page 12 of the City of Palo Alto's comment letter, "When analyzing impacts from lane reductions on a roadway at critical signalized intersections, the use of delay as a measurement tool is the most effective in estimating true impacts from a project and for allowing identification of reasonable mitigation". The Alma Street lane reduction analysis was based on intersection delay.

Please refer to Response to Comment 40-256 regarding the use of local methodologies.

40-290

The City included a table from the Highway Capacity Manual which is also included in VTA's Congestion Management Program (CMP) Traffic Impact Analysis and LOS methodologies. The table shows Level of Service A through F with a written description of each LOS along with the numerical ranges in average control delay associated with each LOS. This is consistent with the analysis that was employed for the traffic analysis.

40-529

The traffic analysis in the Partially Revised Draft EIR based the assessment of possible traffic impacts on intersection delay as suggested in the comment. When the traffic analysis was begun it was determined that intersection delay was the most appropriate means of determining project impacts. Please refer to Response to Comment 40-289 for additional information on why intersection LOS was used to calculate these impacts.

40-291

Please refer to Response to Comment 40-288 regarding the AM traffic analysis.

In general, at the program level of analysis for a statewide project, local methodology and impact criteria are not used as different municipalities employ differing approaches and thresholds of significance. An analysis employing these local standards would not result in a consistent analysis where it would be possible to compare between alternatives that travel through different cities. However, the Partially Revised Program EIR's programmatic traffic analysis was conducted with reference to the second-tier, project-level guidance provided in the Authority's Memorandum Traffic Impact Analysis Guidelines, September 2010. That document establishes conditions that result in a significant impact at the second-tier. As stated in Section 2.3 of that document, "an impact on CMP facilities will be analyzed and assessed significance in accordance with county-adopted CMP criteria." The programmatic traffic analysis along the Peninsula used the appropriate county CMP criteria to assess impacts on CMP intersections.

40-292

Please refer to Response to Comment 40-288 regarding an AM analysis. Chapter 4 of the Partially Revised Draft Program EIR contains information on generalized construction impacts at the programmatic level and Chapter 3 addresses traffic, parking, and circulation, but the analysis does not specifically address local pedestrian and bicycle volumes and their effect on intersection capacity. These impacts will be specifically identified by location in second-tier project-level environmental studies and specific mitigation measures will developed at that time. An analysis of school commute peak periods and any impacts related to the Palo Alto Safe Routes to School program is most appropriately addressed in the project-level document once an alignment is selected and the potential to avoid lane closures can be further investigated.

40-293

A pre-analysis meeting with the City of Palo Alto was not considered necessary to consider the magnitude of impacts between

alternatives and is not required by CEQA. Traffic count information was readily available from prior project-level work and new counts were obtained where necessary. This program-level analysis focused on the highly congested intersections in the study area. Once a preferred alternative has been selected, project-level analysis will look at specific intersections of concern to the City and the City's input will be welcome and sought.

40-294

The City provided a table that compares Level of Service data from the program EIR document and the City's database. The comments states that the City's database uses an industry standard measurement based on the 2000 Highway Capacity Manual and the VTA TIA guidelines. The program-level EIR analysis was also based on the 2000 Highway Capacity Manual and VTA TIA guidelines.

40-295

The level of service comparison provided by the City compared traffic operations at six intersections included in the program-level EIR analysis. The level of service letter designation provided in the comment was the same as the designation within the Partially Revised Program EIR's analysis at most intersections, with the exception of Churchill/Alma where the program-level EIR analysis reported LOS C and the City's database reported LOS D. The traffic counts used in the analysis at Alma/Churchill were collected in the fall of 2008 and were obtained from the City. Updated AM and PM peak hour traffic counts were collected in 2012 at the Churchill/Alma intersection and the level of service analysis was recalculated. Chapter 3 has been revised and contains the updated information for Churchill/Alma in the AM and PM peak hours for existing, existing plus project, 2035, and 2035 plus project. The revised analysis found that this intersection currently operates at or near a failing level of service (E+), which indicates more congestion than the level of service D reported by the City.

The comparison tables show a comparison of LOS and of average control delay. In some cases the average control delay is greater as reported in the program-level EIR and in some cases the delay is greater for the City's database. This is a function of the traffic counts

used to assess the intersection conditions. These traffic volumes can vary substantially on a given day depending on local events, weather, and the day of the count, and will sometimes result in a different finding of impact at a given intersection than what is shown in the City's database.

These traffic counts are also used to create the future forecasts. The MTC travel demand model was used to calculate growth factors which were then applied to the traffic counts to determine a reasonable 2035 scenario for traffic impacts. When the growth factor is applied to intersections where there are existing traffic impacts, the project conditions magnifies that impact. The revised traffic analysis for the program-level EIR analysis found that the intersection of Churchill/Alma functions at or near a failing level of service (LOS D or E) under existing and 2035 conditions without the project. With the project traffic applied, the level of service and delay gets slightly worse and thus the Churchill/Alma intersection has been added to the list of potentially impacted intersections in Chapter 3 (page 3-7) of the Partially Revised Final Program EIR. There continues to be a significant traffic congestion impact for the San Francisco to San Jose corridor as described in the Partially Revised Draft Program EIR.

40-296

The 2008 Program EIR, the 2010 Revised Program EIR, and the 2012 Partially Revised Draft Program EIR evaluate alignment alternatives that would run along different corridors, through different cities and mountain passes. At this program-level, different vertical alignments are not considered. The comment notes that vertical separation of the tracks and Alma Street, with Alma Street remaining at-grade and the tracks depressed in a tunnel section or a covered trench, would eliminate the need for a loss of travel capacity on Alma. This statement is correct and in fact the program-level EIR notes on Pages 3-17 and 3-18 that "Adjust Vertical Alignments" is a design solution to avoid lane closures. Once a preferred alternative is selected, the project-level analysis will consider different alignments that incorporate different vertical segments. During this process, the Authority will work with affected cities to reduce or avoid any potential lane closures.

40-297

The comment lists 16 additional intersections that should have been included in the program-level EIR along El Camino Real, Alma Street, and Middlefield Road. Specifically, the comment notes that Alma/Charleston operates at LOS E and that traffic safety impacts on pedestrian and bicyclists should be addressed.

The traffic analysis assumes that most of the traffic would shift to the nearest arterial roadway, El Camino Real. Since El Camino Real experiences congestion at several locations, shifting all traffic onto this corridor is a conservative approach that would avoid an under-estimation of possible traffic impacts by distributing traffic to a number of parallel roadways. El Camino Real is considerably closer to Alma Street (one tenth of a mile) than Middlefield Road (approximately two thirds of a mile); another reason traffic was assumed to shift to El Camino Real.

Most of the intersections listed in the comment are minor intersections, and some are unsignalized. The program-level analysis focused on the major congested intersections where there was a higher likelihood of triggering a significant impact. The comment also specifically called out Alma/Charleston. This intersection is located outside of the limits of the possible lane closures. Therefore, there will be no loss of roadway capacity but there will be some diversion of through traffic away from Alma in the vicinity of Alma/Charleston, resulting in an improvement in traffic operations at this location.

Finally, some of the intersections on this list may be included in the more detailed analysis which will be part of the project-level EIR analysis, particularly if the loss of travel lane on Alma Street becomes a reality. The traffic safety impacts on pedestrian and bicycle activity would also be a part of the project-level analysis.

40-298

Please refer to Response to Comment 40-289 regarding the differences between the Alma Street analysis and the Monterey Highway analysis and why intersection LOS analysis is more appropriate for Alma Street.

40-299

The comment provides a table that equates level of service to volume to capacity (V/C) ratios. The table is taken from the 2000 Highway Capacity Manual. The table as printed contains an error in the first row, which labels the third column is labeled as average control delay, when it should be labeled as V/C.

It was determined that an intersection LOS analysis was the appropriate means to address loss of lane capacity on Alma Street, please refer to Response to Comment 40-289 for a full explanation. If a volume to capacity ratio analysis was also conducted, it would use the relationships between level of service and V/C shown in Table 3 in the comment.

40-300

Please refer to Response to Comment 40-289 regarding why an intersection delay analysis providing level of service (LOS) ratings was considered more appropriate than a volume to capacity ratio analysis.

40-301

The comment provides a volume to capacity ratio analysis of Alma Street at Churchill Avenue for several hours of the day for northbound and southbound traffic. Table 4 in the comment shows existing traffic volume by hour of the day and then calculates a volume to capacity ratio and corresponding level of service for the existing 4-lane roadway width and for a proposed 2-lane roadway width. However, this analysis assumes there would be no diversion of traffic. The volume to capacity ratio and resulting level of service comparison from 4-lanes to 2-lanes cannot do anything other than worsen because none of the traffic is diverted to parallel streets. Non-diversion of traffic as a result of the roadway capacity being cut in half is thought to be an erroneous assumption.

The analysis contained in the Partially Revised Draft Program EIR is a more representative means of assessing the effect of a loss of capacity on Alma Street.

40-302

The comment states that a queuing analysis at intersections should have been completed and that this situation is particularly acute in Palo Alto because of the limited number of east/west crossings across the rail corridor.

Such a queuing analysis as requested in the comment is not appropriate for consideration in a program-level environmental document. Intersection queue lengths and the ability of existing turn bays to accommodate these queue lengths is the type of detail that is covered in a project-level analysis.

Please refer to Standard Response 3 regarding level of detail at the program level.

40-303

The analysis recognizes the grid street network and that some traffic will filter through multiple streets. However, Alma Street retains significant traffic capacity even as a two-lane roadway because of limited signals and cross streets and will continue to provide local access. The primary loss of Alma Street traffic carrying capacity is to subregional through traffic which is assumed to be shifted to a parallel through arterial, El Camino Real. The minor shift in traffic to adjacent residential streets is considered too small to measure using the TIRE analysis methodology. Traffic diversions and possible pass through traffic impacts in neighborhoods will be evaluated in the project-level analysis once a preferred alignment is selected.

Please refer to Standard Response 3 regarding level of detail at the program level.

40-304

The traffic model used in the Peninsula lane closure analysis for the Partially Revised Draft Program EIR is the MTC travel demand model used for the 2009 update to the Regional Transportation Plan. This is consistent with what the City and the VTA use to conduct traffic analyses. The following discussion is provided to assist readers in understanding how the model works.

The key inputs to that model are future land use projections (growth in population and employment) and the transportation network assumed to be in place in 2035 (both roadways and transit linkages). The model contains mathematical algorithms that replicate the interaction between land uses such as travel between the residential land use and the employment site, travel between the residential land use and commercial centers, travel between the residential land use and other attractions, and travel between the various land uses without a home origin or destination. Once the model determines the land use interactions it assigns that travel to specific modes such as automobiles, transit, or non-motorized based on the availability of those modes of travel. An iterative assignment process is used that balances the amount of traffic on any one facility to the relative capacity of that facility. The traffic assignment process is complete once equilibrium is reached.

40-305

An analysis of possible traffic hazards to bicycle and pedestrian travel associated with lane reductions including an increase in accidents, an important consideration, would be addressed in the project-level environmental document.

The Authority will refer the comments to the Authority staff and consultants who will prepare the applicable project-level EIR/EIS. Please refer to Response to Comment 40-286 and Standard Response 3 regarding level of detail at the program level.

40-306

An analysis of possible traffic hazards associated with a loss of traffic capacity on Alma Street on Palo Alto's Safe Routes to Schools program is most appropriately addressed in the project-level document once an alignment is selected and the potential to avoid lane closures can be further investigated. Please refer to Standard Response 3 regarding level of detail at the program level.

40-307

A possible loss of parking along Alma Street has not been identified as of yet. However, as noted at Page 3-18 of the Partially Revised Draft Program EIR, reducing on-street parking on one or both sides

could be an approach to eliminating the need to remove a lane of traffic. Additional engineering design will need to be completed to determine first if right-of-way from adjacent public streets is actually needed and second, if removal of parking instead of travel lanes meets the needed right-of-way requirements. This analysis, if necessary, will be a subject of the project-level environmental document and will evaluate the trade-offs between the loss of travel lanes versus the loss of parking, with any impacts clearly identified and mitigated, if necessary and feasible.

40-308

The comment states that substantiation of several assertions needs to be provided. These are included later in the comment letter under the heading Specific Comments. Responses to Comments 320 through 328 address the Specific Comments.

40-309

As the comment notes, the approach taken in the 2012 Partially Revised Draft Program EIR to evaluate the impacts of the project against a year 2035 baseline condition, as well as an existing condition, complies with CEQA. The narrowing of Monterey Highway is included in the *Envision San Jose 2040 General Plan* which was adopted on November 1, 2011. The impacts associated with land use buildout along the corridor and the roadway narrowing were fully evaluated and disclosed in the Final Program Environmental Impact Report for the General Plan.

40-310

New information and changed conditions since the September 2010 certification of the 2010 Revised Program EIR were analyzed in Chapter 5 of the Partially Revised Draft Program EIR. Specific development projects are listed in the New Information and Changed Conditions Technical Memorandum listed as a reference in Chapter 9 of the Partially Revised Draft Program EIR. As explained in Chapter 5.2 of the Partially Revised Draft Program EIR, it was determined that the description of the environmental setting of the study corridors and station area cities described in the 2008 Final Program EIR, and as augmented by the 2010 Revised Final Program EIR, remains accurate. While the specific projects listed in the comment

were not approved at the time of the prior Program EIRs, a similar level of development was assumed on these sites in the regional travel demand model. The possible lane closure analysis used the 2035 MTC travel demand model to project future traffic volumes. This model utilizes the land use forecasts for population and employment growth from ABAG. The ABAG forecasts are based on direct input from individual cities. Planned development has thus been taken into account.

40-311

The comment states that Authority will only consider HST stations within communities that support such a station. The City in previous comment letters has indicated they are opposed to a station in Palo Alto. The Authority is aware of this position by the City.

40-312

A first-tier analysis of traffic and parking impacts to potential HST station areas was performed as part of the 2008 Final Program EIR. Please refer to Chapter 3.1 of the 2008 Final Program EIR, including Table 3.1-3. Additionally, Chapter 4 of the Partially Revised Final Program EIR analyzes construction impacts to HST station-area traffic at a first-tier level of detail. At this time, a mid-Peninsula station location option has not been selected, and the Authority is aware of Palo Alto's opposition to a HST station in Palo Alto. Neither design alternatives for any potential station location, nor grade separations, have been refined to a sufficient level of detail for second-tier traffic congestion impacts to be quantified. Once station locations are selected and design alternatives are developed, the project-level analysis reflecting the station location will address traffic impacts to determine if they are significant. If so, appropriate mitigation will be developed. Inadequate parking capacity, addressed in the 2008 Final Program EIR, was removed from Appendix G of the CEQA Guidelines in 2010. Inadequate parking is no longer considered an environmental impact per se. Rather, this issue only falls within the purview of CEQA if there is substantial evidence that a significant secondary environmental impact may occur as a result of an identified lack of parking. Parking issues fall outside the scope of environmental review and are not required to be addressed as part of this Partially Revised Program EIR.

40-313

The comment suggests that a weekend traffic analysis be conducted to assess the possible lane closures and their effect on the surrounding land uses such as shopping centers and Stanford University.

Once a preferred alternative is selected at the program-level, the Authority will consult with affected local governments to determine the appropriate scope of future project-level analysis. If this alternative includes HST service in the Caltrain Corridor, it will be determined if the loss of travel lanes on Alma Street is necessary, or if it can be avoided through design refinements. If the loss of lanes is determined to be required, the project-level analysis could include an analysis of weekend traffic conditions if, in consultation with the City, such an analysis is determined to be required. Such issues will be identified and resolved in the scoping process for the project-level document.

40-314

Analysis of traffic conditions outside of the traditional weekday peak periods is rarely done. As noted in Response to Comment 40-313, once a preferred alternative is selected at the program-level, the Authority will consult with affected local governments to determine the appropriate scope of future project-level analysis. The project-level analysis will consider bicycle and pedestrian safety and hazards, and could include an off-peak traffic analysis if it is determined to be necessary. This would be discussed and resolved in the scoping process for the project-level document.

40-315

The Partially Revised Program EIR did not include an AM traffic analysis. However, an AM analysis has been completed and is included in Chapter 3 of the Partially Revised Final Program EIR. The traffic analysis in Chapter 3 has also been updated with new traffic counts in the AM peak hour that capture this signal's modification and the school traffic. Please refer to the Response to Comment 40-288 for a discussion of the results of the AM analysis.

40-316

Please refer to the Response to Comment 40-297 for a discussion of why El Camino Real is conservatively assumed as the route that would receive the majority of the diverted traffic.

Alma Street is a very efficient commuter route because of the absence of a large number of crossing intersections and traffic signals. Traffic on crossing streets from the east of Alma Street is associated with traffic that is generated locally and uses local streets to travel to and from destinations in the immediate area, such as downtown Palo Alto. The loss of traffic capacity on Alma Street would mainly affect the through traffic capacity (commuters through the area). This through traffic is assumed to divert to El Camino Real. Traffic to and from the neighborhood that is generated locally would continue to use the remaining capacity on Alma Street and crossing streets.

40-317

Potential construction impacts are addressed in Chapter 4 of the Partially Revised Draft Program EIR. The impacts on traffic are considered to be potentially significant, and it is not known at this time whether the impacts can be avoided or reduced through mitigation measures. Design alternatives have not been refined to a sufficient level of detail for construction impacts on be quantified. Once a preferred alignment is selected, additional engineering detail will be developed prior to commencing the project-level environmental analysis and will consider the location-specific potential impacts of construction, different vertical alignments, and grade crossings. The project-level analysis will address construction impacts on determine if they are significant. If so, appropriate mitigation will be developed.

The potential impacts of grade separations, including traffic impacts, are addressed in Chapter 5.3 of the Partially Revised Draft Program EIR. At the program level, the impacts associated with grade separation are considered significant even with the application of mitigation strategies, particularly in light of the uncertainty associated with how they would be accomplished.

Please also refer to Standard Response 3 regarding the appropriate level of detail in a program-level EIR.

40-318

The analysis to date has indicated that a loss of lane capacity may occur on Alma Street, but engineering detail has not been completed to determine what the geometric configuration of Alma Street may ultimately be. For example, the removal of 4 to 5 feet from a travel lane to provide right-of-way to the HST would certainly reduce the traffic carrying capacity by one lane; however, the remaining lane width could be reallocated as an on-street, striped bicycle lane. Sufficient engineering detail has not been prepared to state whether an impact on bicycle travel would or would not occur. Prior to completing the project-level environmental document, that engineering detail will be available and potential hazards to pedestrians and bicyclists will be addressed in the project-level traffic analysis.

40-319

This Program EIR is specifically designed to assist the Authority in making the fundamental choice of a preferred alignment within the broad corridor between and including the Altamont Pass and Pacheco Pass for the HST segment connecting the San Francisco Bay Area to the Central Valley. As a programmatic document, the Program EIR does not analyze detailed, site-specific impacts of future projects to construct sections of the HST system. For this reason, in selecting alignments and station locations, the Authority will not be selecting a precise footprint for improvements, but rather a conceptual corridor alignment subject to further refinement. Future tiered project-level environmental documents will assess the impacts of constructing and implementing individual HST projects for sections of the HST system and will examine specific project location alternatives for the selected corridor alignment and alternative station sites for the selected location options.

The Special-Use Stanford Stadium Caltrain stop is not used on a daily basis but is, as the name implies, used on rare occasions for Stanford athletics home games, particularly football games. At this

program level of analysis, no decisions are being made that would preclude the future consideration and use of this station

40-320

The VTA Model is a conventional four-step traffic demand model. The model is updated periodically to reflect forecasted changes in local land use. The VTA Model as of spring 2011 was utilized to conduct the traffic modeling for the revised program-level analysis. The changes to the model as of spring 2011 include enhancements to reflect the most current Association of Bay Area Governments (ABAG) and Association of Monterey Bay Area Governments (AMBAG) projections of population and employment growth, but do not include the mode-shift due to the California HST Project. The project-level traffic report will have a detailed explanation describing the VTA Model.

40-321

No substantial traffic hazards are expected during construction due to the narrowing. As explained in Section 3.18.3 of the 2012 Partially Revised Draft Program EIR, to maintain traffic flow during construction, traffic would be first shifted to one side of the existing roadway while the opposite side is improved, then shifted onto the newly improved portion while the other side is improved. During times of low traffic volumes, additional lanes would be coned off to provide temporary additional work space. Multiple stage reconstruction would be used to accommodate the existing traffic flows through the project area and provide adequate space for safe and cost-effective construction operations. More details of construction staging would be determined at the project level.

40-322

As the text indicates, the regional transportation context discussed in the Affected Environment section of the 2008 Final Program EIR is still correct. While there have been new roadway and development projects in the region (please refer to Response to Comment 40-310), the analysis was found to still be accurate and adequate for the purposes of this programmatic evaluation. The new discussion of potential lane closures in the Peninsula required some new traffic modeling because not all of the studied intersections had been

evaluated in previous program-level analysis. Rather than using the existing model data, the traffic volumes used in the analysis were updated to reflect some of the roadway and development projects that have come on line. New intersection traffic counts were used from data assembled in 2010 when the initial traffic work was begun for the project-level analysis. Additionally, new traffic counts were conducted in late 2011 and 2012 at some intersections that were analyzed in the lane closure analysis but that were not analyzed in previous work.

40-323

In response to this and other comments from the City, an AM peak analysis has been provided in Chapter 3 of the Partially Revised Final Program EIR. One new intersection is shown to have traffic impacts during the AM peak hour (Churchill/Alma). Please refer to revised Chapter 3 and Response to Comment 40-288 for additional information on the AM peak analysis and this intersection.

40-324

Chapter 3 of the Partially Revised Draft Program EIR provided an analysis of the first-tier effects of Monterey Highway narrowing on surrounding streets, including US-101, I-280, SR-87 and SR-85. The level of detail for this analysis identified increases in traffic volumes on roadways nearby to Monterey Highway. Please refer to Figures 3-2, 3-3, 3-4, and 3-5 of the Partially Revised Draft Program EIR. The comment requests that additional information on the LOS of these highways be included. This level of detail will require in-depth analysis, which is outside the scope of a program-level traffic study. The second-tier impacts of narrowing Monterey Highway and that of mode-shift due to the HST on the surrounding roadway network will be analyzed at the project level.

40-325

Peak hour traffic spreading is a well-documented phenomenon that occurs in urban settings. As congestion builds in the peak hour and volume to capacity ratios reach 1.0, additional capacity is not available during the peak hour to serve more traffic and it must shift to the hours on either side of the peak. It is theoretically impossible for the volume to capacity ratio to exceed 1.0. However,

existing traffic volumes sometimes are found to have a volume to capacity ratio of up to 1.05, but rarely any greater than that. The Partially Revised Draft Program EIR recognizes peak hour spreading and states that it could occur. However, peak hour traffic volumes were not reduced in an attempt to demonstrate peak hour spreading and thereby reduce the possible traffic impacts during the peak hour.

40-326

Contrary to the suggestion in the comment, adjusting vertical alignments represent a design modification practice, not mitigation. If an aerial structure is ultimately recommended for an above grade alignment through Palo Alto, the construction impacts, such as additional construction traffic and temporary road closures due to construction, will be evaluated in the project-level analysis. If the construction impacts are found to be significant, appropriate mitigation will be recommended. Please also refer to Response to Comment 40-286 for a discussion of secondary impacts.

40-327

Please refer to Response to Comment 40-307 regarding potential reductions of on-street parking and Response to Comment 40-287 for a discussion of effects to businesses and the scope of future project-level analysis.

40-328

The Partially Revised Program EIR included possible design modifications that included modifying the HST alignment either horizontally and/or vertically, or modifying the affected roadways. These potential design modifications, or other mitigation strategies, require a certain level of engineering design to prove their effectiveness. The engineering design to mitigate lane closure traffic impacts will not be completed until it is determined that the lane closures are in fact necessary. As written, the text indicates that it is anticipated that most of the impacts can be reduced to a less-than-significant level, but acknowledges that it is possible that lane reductions could result in some impacts that cannot be reduced to less than significant. The project-level environmental document will contain this more detailed analysis for the preferred alternative.

40-329

Because this is a program-level document, potential construction impacts on each resource area are not site-specific. The construction methods that would most likely be employed during construction of the HST project, and their resulting environmental impacts, are described in individual resource chapters in Chapter 3, of the 2008 Final Program EIR, in Chapter 3.18 of the 2008 Final Program EIR and Chapter 4 of this 2012 Partially Revised Final Program EIR.

Furthermore, the general level of detail in the EIR's impacts analysis, including that related to construction noise, and the general nature of the mitigation strategies are appropriate for the broad decisions to be made. The Program EIR identifies critical environmental impact differences between the Altamont Pass, Pacheco Pass, and Pacheco Pass with Altamont Pass (local service) alternatives for connecting the Bay Area with the Central Valley. More detailed consideration of impacts and mitigation measures will be included in the next tier of project-level environmental documents.

Refer to Standard Response 3 regarding an appropriate level of detail in this program EIR.

40-330

The impacts on Monterey Highway and the surrounding street network due to the narrowing (without considering the mode-shift to HST) are presented in Section 3.3 of the 2012 Partially Revised Draft Program EIR. All roadway segments which would degrade from LOS D or better to LOS E and the roadway segments already operating at LOS E and forecasted to have 100 or more additional vehicles per hour due to the narrowing are presented in Figures 3.2-b, 3.3-b, 3.4-b and 3.5-b. More detailed results than what is presented in these figures would require in-depth analysis, which is outside the scope of a program-level traffic study. The impact of narrowing Monterey Highway and that of mode-shift due to the HST on the surrounding roadway network will be analyzed at the project level.

No substantial traffic hazards are expected during construction due to the narrowing. As explained in Section 3.18.3 of the 2012 Partially Revised Draft Program EIR, to maintain traffic flow during construction, traffic would be first shifted to one side of the existing

roadway while the opposite side is improved, then shifted onto the newly improved portion while the other side is improved. During times of low traffic volumes, additional lanes would be coned off to provide temporary additional work space. Multiple stage reconstruction would be used to accommodate the existing traffic flows through the project area and provide adequate space for safe and cost-effective construction operations. More details of construction staging would be determined at the project level.

40-331

The Authority disagrees that quantification of construction emissions is typical or appropriate for the Program EIR. At the program level, the broad potential impacts of construction can be identified, but the detailed, project-level information needed to prepare a quantification of construction emissions is not available. The information required to complete a detailed construction air quality impact assessment, such as the type, scale, and duration of construction activities along with the precise type and amount of construction equipment that would be used for these activities are not available at the first-tier, programmatic stage. To further underscore the fact that a quantification of construction air quality impacts is not typically completed at the program-level, the reader is referred to the BART to Livermore Extension Program EIR (BART 2010). Furthermore, the Partially Revised Draft Program EIR addresses those topics identified in the final judgment for the *Atherton 1* and *Atherton 2* litigation as requiring corrective work under CEQA. The potential for construction air quality impacts was not one of those topics. Refer to Chapter 3.3, Air Quality and Global Climate Change, of the 2008 Final Program EIR and Chapter 4 of the Partially Revised Final Program EIR for a discussion of construction air quality impacts and mitigation strategies at the program level.

Refer to Standard Response 3 regarding an appropriate level of detail in this program EIR.

40-332

An assessment of typical construction operations and noise construction impacts will be conducted and presented in the project-level noise technical report and EIR/EIS. A specific quantification of

noise impacts due to construction cannot be effectively determined until the final design phase. The information required to complete a detailed construction noise impact assessment, such as the type, scale, and duration of construction activities along with the type and amount of construction equipment that would be used for these activities are not available during the first-tier, program stage. Therefore, the detailed noise impact and mitigation analysis for construction noise using exact equipment specifications, and input from the public will be developed as part of the second-tier environmental review process. The list of mitigation strategies in Chapter 2 of the 2012 Partially Revised Final Program EIR for noise and vibration construction and operations impacts has been revised to affirm that “state-of-the-art” construction equipment, materials, and abatement techniques will be used to achieve the maximum feasible reduction in noise and vibration impacts.

The list of mitigation strategies for noise and vibration construction impacts in Chapter 4 of the 2012 Partially Revised Final Program EIR has been revised to include resident notification prior to construction activities and the establishment of a 24-hour noise hotline to receive and respond to residents’ concerns regarding noise, vibration, and light disturbances.

40-333

Chapter 4 concludes that construction impact mitigation strategies will be effective at reducing construction impacts to less than significant in the areas of air quality, noise, energy, hazardous materials and wastes, geology and soils, and hydrology and water resources. The Authority does not agree with the comment that these areas must be described as significant and unavoidable impacts until a detailed, project-level evaluation has been prepared. The text notes that the mitigation strategies in the listed areas are generally accepted best practices and consistent with mitigation typically implemented for heavy civil construction. These measures are also generally effective. For example, the mitigation strategies for construction noise are consistent with those identified in the FRA Guidance Manual.

Please refer to Standard Response 3 regarding an appropriate level of detail in this program EIR.

40-334

Comment acknowledged. The Partially Revised Draft Program EIR reiterated the conclusions reached in the 2008 Program EIR that construction impacts may be significant, even with the application of mitigation strategies in specific resource areas. The discussion following the second list of bulleted items has been revised to clarify the conclusions reached in the 2008 Program EIR. More detailed consideration of impacts and mitigation measures will be included in the next tier of project-level environmental documents.

40-335

The 2008 and 2010 programmatic EIRs and the 2012 Partially Revised Draft Program EIR are all focused around assisting with making the fundamental choice of a preferred alignment for HST service to the San Francisco Bay Area. This is explained in Section 1.4 of the Partially Revised Draft Program EIR. Refer also to Response to Comment 40-258.

Please refer to Standard Response 1 and Chapter 5 in this document for additional information on the blended-system concept. The reason that the 2012 Business Plan focuses on the San Francisco to Los Angeles and not a connection to Oakland via San Jose is because a connection to Oakland is not part of the Phase I system described in Proposition 1A. While a connection to Oakland via San Jose is a viable corridor identified in Proposition 1A, the first priority of Proposition 1A is creating a system between San Francisco and Los Angeles.

Network alternatives with an Oakland Station were studied as part of the Program EIR document and found to be a viable network alternative with good ridership demand. The Authority will be evaluating a “Blended System” between San Francisco and San Jose (refer to Standard Response 1), which should be similar with the two-track system that the commenter is suggesting. Connecting San Francisco and San Jose via a blended system will be the Authority’s first priority evaluation. A high-speed rail connection to Oakland would most likely be evaluated only after the initiation of service on the Caltrain Corridor.

The 2008 and 2010 Program EIRs, in combination with this Partially Revised Final Program EIR, provide an in-depth program-level analysis of the potential impacts of different network alternatives.

40-336

Comment acknowledged. The fourth sentence of the last paragraph on Page 5-9 has been revised to clarify that grade separations may result in potential vibration impacts.

40-337

The 2008 Bay Area to Central Valley HST Final Program EIR/EIS considered impacts for HST network alternatives covering an area reaching from near the cities of Chowchilla and Manteca in the San Joaquin Valley to San Jose, Oakland, and San Francisco in the Bay Area. Considered for the entire study area, the impacts of project phasing or a "blended system" are not distinguishable at the program level, as they consider HST service under similar operations to similar phased terminals. The blended or phased approach would not include an HST crossing at Dumbarton. A phased terminal for Altamont alternatives would be Union City. A phased terminal for Pacheco alternatives would be San Jose. Travel times are similar to each terminal and each option connects to a regional rail service that can bring passengers to San Francisco.

There would be different impacts from each alternative, such as the likelihood of more Caltrain service between San Jose and San Francisco under Pacheco alternatives, or more BART service on the Fremont line under Altamont alternatives, but those impacts would be similar in nature. The HST construction from the Central Valley in to reach either interim terminal, San Jose or Union City, would create similar impacts for either alternative when analyzed at a program level.

40-338

There was no defined Livermore BART extension when the Bay Area to Central Valley HST analysis was undertaken, and therefore no traffic generation or impact data associated with a Livermore BART extension to consider. The 2008 Bay Area to Central Valley HST Final Program EIR/EIS pre-dated environmental work on BART's

Livermore extension. The Draft Program EIR for BART was released in November 2009, the Preferred Alternative Memorandum was issued in June 2010, and Final Program EIR adopted in July 2010. A project-level document for the BART to Livermore extension has just commenced as of February 2012.

40-339

The Caltrain Corridor is the only continuous rail corridor between San Jose and San Francisco so it is appropriate for it to be identified as such. One of the fundamental benefits of using the Caltrain Corridor is that the Caltrain system benefits from the synergies of having both HST and Caltrain trains share the same infrastructure. Below is an explanation of the benefits of this shared corridor opportunity.

The full text, on Page S-20 of the 2008 Final Program EIR, provides a more complete explanation of the rationale:

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. Utilizing the Caltrain Corridor (between San Francisco and San Jose) allows 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.

Nevertheless the heading in Chapter 6 has been revised.

40-340

Statements of support and opposition for various alternatives provide decision-makers with information on individual, community and agency reactions. Reporting the level of support/opposition for alternative is but one criterion that decision-makers use to select an alternative, but it is the one that provides a consolidated reporting of community reaction to every alternative. A detailed discussion of statements of support and opposition for various alternatives was

provided in Chapter 6 of the Partially Revised Draft Program EIR. The Authority acknowledges that public input on the Partially Revised Draft Program EIR has been less clear in support or opposition to the network alternatives, and has focused much more on a preference for “no project” in the Bay Area to Central Valley study area and no HST system at all.

40-341

The comment refers to a brief bullet point discussion of noise and vibration as related to operational noise and indicates that significant noise and vibration impacts may occur in the San Francisco to San Jose Corridor on adjacent land uses. The discussion on Page 4-18 is related to construction impacts, and clearly states with respect to vibration impacts that *“Sufficient information is not available at this programmatic level to conclude with certainty that the above mitigation strategies would reduce the impacts from construction of the project to a less than significant level in all circumstances.”* Therefore, the text in both sections is consistent in identifying potential noise and vibration impacts on adjacent land uses during both project construction and operation.

40-342

The reference to the Peninsula Cities Consortium refers to comments made during the public review process for the Draft Bay Area to Central Valley HST Program EIR/EIS in 2010. The City of Brisbane joined the Peninsula Cities Consortium in October 2010, and was not a party to those comments. No change to the January 2012 Partially Revised Draft Program EIR is necessary.

40-343

Comment acknowledged. Chapter 6 has been revised to include the requested information.

40-344

The City of Palo Alto's support for an Altamont Network Alignment is noted. A discussion of comments of support is included in the Partially Revised Draft Program EIR on Page 6-10.

40-345

The Authority has reviewed the City of Palo Alto's prior comment letters on the 2010 Revised Draft Program EIR, the 2010 Revised Final Program EIR, and the 2010 Preliminary Alternatives Analysis Report for the San Francisco to the San Jose Section, and has reviewed its responses to those comment letters. The Authority's prior responses are still valid, and the Authority offers additional responses to individual comments in the following responses.

40-346

Please refer to Response to Comment 40-346.

40-347

This appears to be a comment specific to the 2010 Revised Final Program EIR. This comment did not identify any significant new information that would have required recirculation of the 2010 document. To the extent this comment also applies to the Partially Revised Draft Program EIR, the comment does not identify any significant new information that would require recirculation of the Partially Revised Draft Program EIR. More detailed responses will be provided where the commenter offers a more detailed rationale for why it contends further recirculation is necessary.

40-348

This appears to be a comment specific to the 2010 Revised Program EIR. In response to this comment, the Authority previously indicated that the detailed information being developed as part of project-level environmental studies did not require recirculation of the Revised Draft Program EIR. The purpose of tiering is to allow the Authority to select a preferred network alternative and general mitigation strategies at the program level to be followed by more detailed, project-specific analysis and development of more detailed and refined alternatives and mitigation measures. In response to the November, 2011 Town of Atherton rulings, which required recirculation to address certain specific impacts based on information that was developed as a part of project-level environmental studies, the Authority released the Partially Revised Draft Program EIR. To the extent this comment also applies to the Partially Revised Draft

Program EIR, as discussed in Chapter 5, no significant new information has been generated for the project-level sections for San Francisco to San Jose and for San Jose to Merced since the September 1, 2010 certification of the Revised Program EIR.

It should be noted, that the Authority placed its project-level work for San Francisco to San Jose on hold in May 2011. No decisions have been made about a second-tier project or the scope of environmental analysis in a second-tier EIR. At this time, it is anticipated that any further work on a second-tier project would have to start afresh, with a new second-tier planning and CEQA process and a new notice of preparation.

40-349

This appears to be a comment specific to the 2010 Revised Program EIR. In response to this comment, the Authority previously indicated that the program-level land use compatibility evaluation for this alignment is provided in Section 2.2 of the 2010 Revised Final Program EIR. The revised program-level property evaluation is also provided in Section 2.2 of the 2010 Revised Final Program EIR, as is the revised evaluation of Environmental Justice.

To the extent this comment also applies to the Partially Revised Draft Program EIR, please refer to the noise analysis in Chapter 2 of the 2012 Partially Revised Program EIR related to Monterey Highway. Detailed noise analyses will occur for the alignments and station locations at the second tier. Please also refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation. Additional information is provided in Chapter 3 of the 2012 Partially Revised Program EIR regarding traffic impacts of lane reduction on Monterey Highway and Chapter 4 regarding construction impacts.

40-350

Based on Caltrans documents, the San Mateo bridge retrofit was completed in 2000 followed by the widening of the structure from four to six lanes completed in 2003. The commenter may be referring to the planned seismic retrofit of the Dumbarton Bridge which will strengthen the existing bridge to withstand a Maximum Credible Earthquake. This design of the retrofit of the existing bridge

structure is complete and construction began in 2010. The Authority has reviewed a reasonable range of alternatives. Please refer to the 2010 Revised Final Program EIR and Response to Comment L003-7 in that document.

40-351

This appears to be a comment specific to the 2010 Revised Program EIR. In response to this comment, please refer to Response to Comment L003-8 in the 2010 Revised Final Program EIR. Several alternatives from the East Bay to the Central Valley were considered as part of the Bay Area to Central Valley Program EIR process. As noted in Table 2.5-4 of the 2008 Final Program EIR (Page 2-43), SR-84/South of Livermore Alignment Alternative and the SR-84/I-580/UPRR Alignment Alternative were screened out from further study in the program environmental documents. As shown in the table, principal reasons for rejection of these alignments included natural resources, habitat and endangered species, agricultural lands, and water resources impacts. Please also see Appendix 2-G1.4 in the Final Program EIR for a discussion of alignment alternatives and station location options eliminated from further consideration.

40-352

This appears to be a comment specific to the 2010 Revised Program EIR. To the extent this comment also applies to the Partially Revised Draft Program EIR, the November, 2011 Town of Atherton rulings found that only those issues in the Partially Revised Draft Program EIR required further CEQA compliance. However, the Authority has responded to all comments received on the Partially Revised Draft Program EIR and has gone beyond the requirements of CEQA Guidelines Section 15088.5 by not only responding to comments on topics outside the scope of the Partially Revised Draft Program EIR but has also responded to old comments on prior documents, such as this comment.

The Authority respectfully disagrees that "the ridership projections and business plan, have been shown to be flawed" and the comment provided no information about "flawed fundamental assumptions and underpinnings of the analysis." The rulings in the Atherton 1 and Atherton 2 cases did not find fault with the information relied upon

from the 2009 Business Plan in the 2010 Revised Final Program EIR. Refer to Standard Response 4 in the 2010 Revised Final Program EIR, Comments about the Ridership forecasts, and Standard Response 8 in the 2010 Revised Final Program EIR, The Authority's Business Plan (refer to Chapter 12 of the 2010 Revised Final Program EIR).

40-353

The purpose of the discussion in Chapter 6 in the 2012 Partially Revised Program EIR is to revise and update the discussion of the preferred alternative in the 2010 Revised Program EIR based on the Partially Revised Draft Program EIR information. The text regarding those who support or have expressed concern over the Pacheco or Altamont network alternatives is intended to disclose the wide divergence of opinion in the San Francisco Bay area over which mountain pass should be selected.

40-354

The Authority acknowledges that the FRA may be requested to provide an exemption for non-compliant equipment to operate in the same corridor with the HST project, if the Caltrain alignment between San Francisco and San Jose is included in the network alternative ultimately selected by the Authority for further study. This is discussed in the May 2008 Final Program EIR in Chapter 2, pp. 2-16 to 2-17, with respect to the Caltrain Corridor. In May 2010, the FRA provided a waiver to the Peninsula Corridor Joint Powers Board to allow for non-compliant equipment to operate on the Caltrain Corridor as part of Caltrain Electrification.

40-355

Streets and Highways Code Section 2704.09 sets forth certain HST system characteristics, including trip times between certain cities, Oakland among them. Also, Section 2704.09(b) states that nothing in this section shall prejudice the Authority's determination and selection of the HST alignment from the Central Valley to the Bay Area. The 2008 Final Program EIR considers alternatives that would serve Oakland, includes three potential station locations in Oakland, and notes the ability to meet the requisite express (non-stop) trip times between cities. For example see the Final Program EIR Volume

1, Chapter 2, summary table 2.5-1 (p. 2-23 to 2-26), text and diagrams; Volume 2, Appendix 2-F-16 through 24, and Volume 1, Chapter 7, p. 7-9. Oakland was not included in the preferred alternative. See the Final Program EIR Volume 1, Chapter 8. The information in the 2012 Partially Revised Draft Program EIR did not alter the preferred alternative identified in the 2008 or 2010 program EIRs. See Page 6-2 of the 2012 Partially Revised Draft Program EIR.

40-356

This appears to be a comment specific to the 2010 Revised Program EIR. The Authority disagrees that the project description of the 2008 Final Program EIR, or the 2010 Revised Program EIR, did not adequately describe or disclose that there was an HST segment along the San Francisco Peninsula between San Francisco and San Jose. See Chapter 2, Section 2.5.1, of the 2008 Final Program EIR for a description of segments including between San Francisco and San Jose and also see Chapter 10 for a discussion of outreach. See Chapter 1 in the 2010 Revised Draft Program EIR for the basis for preparing and circulating the Revised Draft Program EIR.

To the extent this comment also applies to the Partially Revised Draft Program EIR, please refer to Chapter 1 in 2012 Partially Revised Draft Program EIR for the basis for preparing and circulating the Partially Revised Draft Program EIR.

The public process undertaken for outreach regarding the Program EIR process was comprehensive and fully compliant with CEQA. Public notification of the release of the 2008 Program EIR, the 2010 Revised Program EIR, and the 2012 Partially Revised Program EIR was extended to include notification a large population of individuals, public entities, and organizations. The Notice of Availability and Notice of a Public Meeting for the Partially Revised Draft Program EIR was published in 11 newspapers and distributed to 16 libraries throughout Bay Area and Central Valley. CEQA includes no specific requirements for holding public meetings in conjunction with release of a Draft EIR or a revised Draft EIR. The Authority did more than CEQA requires by holding two public meetings: one to receive comment on the Revised Draft Program EIR in April 2010 in San Jose, and one in February 2012 in San Jose to receive comment on the Partially Revised Program EIR.

40-357

Detailed and updated cost estimates will be included in the Project EIR/EIS documents for each section. 2006 costs were used to compare with other cost estimates prepared as part of the 2008 Final Program EIR. The use of cost figures expressed in 2006 dollars is discussed at Page 6-1 of the Partially Revised Draft Program EIR.

40-358

The comment does identify any specific mitigation strategy that is inadequate. Mitigation strategies are discussed in an adequate level of detail in the 2008 Final Program EIR, 2010 Revised Final Program EIR, and the 2012 Partially Revised Draft Program EIR. Refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation.

40-359

This topic was not identified by the Superior Court as an area requiring additional work under CEQA in the Town of Atherton litigation. Appropriate significance criteria have been used for the Authority's CEQA program-level documents.

40-360

This appears to be a comment specific to the 2010 Revised Program EIR. The 2010 Revised Draft Program EIR addressed the issues identified by the Superior Court in the Town of Atherton case for further CEQA compliance, including the issue of property impacts as they relate to UPRR's denial of use of its right-of-way. Other types of local impacts were not identified by the court as requiring further CEQA compliance. The court did hold that local impacts such as noise, visual, and effects on mature and heritage trees were adequately assessed for a program EIR. To the extent this comment also applies to the Partially Revised Draft Program EIR, the level of detail in the Partially Revised Draft Program EIR is appropriate for a first-tier document. Refer to Standard Response 3 regarding the level of detail appropriate at the program level.

40-361

This appears to be a comment specific to the 2010 Revised Program EIR, and cites text from the 2010 Revised Program EIR. In response to this comment, the Authority previously indicated that impacts on biological resources were considered in Chapter 3.15 of the May 2008 Final Program EIR. The data for biological resources and wetlands were interpreted and synthesized to the appropriate level for a program-level environmental analysis. The analysis in Section 3.15 also identifies the need for field reconnaissance-level surveys to be conducted as part of the future Tier 2 project-level environmental analysis. These future surveys will determine specific wetland type, quality, habitat conditions, and impacts along the HST alternative and surrounding areas. At the project level, the Authority is committed to working with the resource agencies to identify alignments that would further avoid or minimize potential impacts. Mitigation strategies identified at the program level will be refined and applied at the project level to mitigate significant impacts. The Authority will continue coordination with all agencies and organizations involved to identify specific issues and develop solutions that avoid, minimize, and mitigate potential biological impacts.

The Authority did not "only equate miles of disturbance with environmental impacts" as suggested. However, in some cases, miles of disturbance can be helpful towards explaining differences in potential impacts between alternatives. Like the original Bay Area to Central Valley Program EIR, the recirculated material involves a programmatic level of detail. The data for biological resources and wetlands were interpreted and synthesized to the appropriate level for a program-level environmental analysis. Refer to Chapter 3.15 of the 2008 Final Program EIR. As noted in Chapter 8 of the Final Program EIR, the U.S. EPA and the U.S. Army Corps of Engineers concurred with this level of information to identify the Pacheco Pass network alternative serving San Francisco via San Jose was the corridor most likely to contain the Least Environmentally Damaging Practicable Alternative (LEDPA) in 2008. To the extent this comment also applies to the Partially Revised Draft Program EIR, the discussion in Chapter 6 identifies length of alignments and acreage of wetland, floodplain, stream, and water body impacts as factors

that were considered in determining the preferred alternative. The Authority did not determine that “one acre of wetlands in one location is equivalent to one acre elsewhere.” However, comparing acreage of wetlands can be helpful towards explaining differences in potential impacts between alternatives. The analysis of wetlands was appropriate for a first-tier environmental analysis.

40-362

This appears to be a comment specific to the 2010 Revised Program EIR. In response to this comment, the Authority previously indicated that impacts on biological resources were considered in Chapter 3.15 of the 2008 Final Program EIR. The biological analysis was based on the thresholds and criteria set in CEQA Appendix G. Impacts on nonsensitive species and habitats were not considered a criterion to base decisions of identifying a preferred alternative. Methods of impact evaluation for the project were developed with input from both state and federal resource agencies. Additional detailed information regarding potentially affected species will be provided in the subsequent project-level environmental evaluation and documentation. This information will include species descriptions, distribution, seasonal activity, range, reproduction, habitat characteristics, population status, threats, conservation status, and a detailed evaluation of effects of the project and proposed mitigation.

To the extent this comment also applies to the Partially Revised Draft Program EIR, the Authority’s previous response as set forth above remains valid.

40-363

This appears to be a comment specific to the 2010 Revised Program EIR. In response to this comment, the Authority previously referred the commenter to Chapter 3.15 of the 2008 Final Program EIR. The analysis in Section 3.15 also identifies the need for field reconnaissance-level surveys to be conducted as part of the future Tier 2 project-level environmental analysis. These future surveys will determine specific habitat conditions and impacts along the entire preferred HST network alternative and surrounding areas. This detailed analysis will identify specifically where there are construction and operation impacts, including noise, vibration, and

potential pollution concerns, on critical wildlife corridors, wetlands, sensitive habitat, and special-status species. At the project level, alignments would be further designed to avoid or minimize potential impacts. Mitigation strategies identified at the program level will be refined and applied at the project level to mitigate significant impacts. The Authority will continue coordination with all agencies and organizations involved to identify specific issues and develop solutions that avoid, minimize, and mitigate potential biological impacts.

To the extent this comment also applies to the Partially Revised Draft Program EIR, the Authority’s previous response as set forth above remains valid.

40-364

This appears to be a comment specific to the 2010 Revised Program EIR. In response to this comment, the Authority previously indicated that the 2010 Revised Final Program EIR included a revised description of the HST alignment between San Jose and Gilroy. This revised description of the HST alignment clarifies that the HST tracks would be placed adjacent to, and not within, the mainline right-of-way owned by UPRR in this area. The revised project description does not result in changes to the discussion of biological resources and wetland impacts as included in the May 2008 Final Program EIR. Moreover, the study area as discussed in the 2008 Final Program EIR extended out 1,000 ft. in urban areas and 0.25 mile in rural areas on each side of the alignment. The impacts analysis in the 2008 Final Program EIR therefore remains valid.

To the extent this comment also applies to the Partially Revised Draft Program EIR, the Authority’s previous response as set forth above remains valid.

40-365

Nothing about the Partially Revised Program EIR changes anything about the prior analyses of cultural resources. The revised project description between San Jose and Gilroy provided in Chapter 2 of the 2010 Revised Final Program EIR did not result in changes to the discussion of cultural resources from the 2008 Program EIR beyond the Keesling’s shade trees. The analysis for cultural resources in

Chapter 3.12, Cultural Resources and Paleontological Resources, in the May 2008 Final Program EIR evaluated an Area of Potential Effect (APE) of 500 ft. on each side of the centerline of proposed HST alignments where additional right-of-way could be needed; 100 ft. on each side of the centerline for HST alignments along existing highways and railroads where very little additional right-of-way would be needed; and 500 ft. around station locations. The placement of HST tracks adjacent to the UPRR right-of-way does not increase the level of impact at the program level beyond what was identified in the Revised Draft Program EIR. A detailed cultural resources investigation and evaluation of measures to minimize and mitigate impacts consistent with Section 106 of the National Historic Preservation Act will be conducted as part of project-level environmental documents.

Throughout the program environmental process, the Authority and FRA have consulted with the State Historic Preservation Office (SHPO) regarding the HST project. At the program level, the FRA and the Authority initiated consultation with the California Native American Heritage Commission (NAHC) and requested a search of their Sacred Lands file to identify any traditional cultural properties that could be potentially impacted or affected by the project, and requested lists of Native Americans to contact for the areas that could be affected by the project, as required by 36 CFR § 800.4(1)(4). The FRA and Authority have coordinated with Native Americans as part of the program environmental process identifying proposed project alternatives and requesting information about any archaeological sites, traditional cultural properties, or sacred sites that could be affected by the project. Authority staff contacted tribal representatives to discuss the HST Alignment Alternatives under consideration for the Bay Area to Central Valley.

Cultural resources studies for the program included records searches obtained from the appropriate California Historical Resources Information System (CHRIS) Information Centers. The records searches identified the general locations of previously recorded archaeological sites in the APE. Prior studies were also reviewed to identify site locations and to identify areas with high archaeological sensitivity. The method used to predict potential effects and impacts of the HST program on historic properties and historical resources

was based upon estimating the amount of historic development that occurred along each proposed alignment alternative and the records search. These estimates were based upon review of existing documentation, including historical maps, aerial photographs, and local inventories, and the preparers' knowledge of the history of the region. No field surveys to identify archaeological resources or historic-period properties/resources were conducted, nor would this be appropriate for a program-level analysis. Surveys will be conducted as part of the project-level EIR/EIS. The Authority and FRA worked with the SHPO on the phased approach for cultural resources.

See Chapter 3.12 of the 2008 Final Program EIR for mitigation strategies. Resource-specific cultural resources mitigation measures such as those resulting from noise, vibration, and visual intrusion will be developed as part of the project-level EIR/EIS and through Section 106 of the National Historic Preservation Act. Under Section 106 (36 CFR § 800), the procedures to be followed at the project level include identification of resources, evaluation of their significance under the National Register of Historic Places and CEQA, identification of any substantial adverse effects, and evaluation of potential mitigation measures. Specific resources within the Area of Potential Effects will be further examined in detail at the project level because the identification of potentially affected resources and project effects and mitigation are dependent on the HST location and system design, and can only be done at the project level.

40-366

One purpose of the 2010 Revised Program EIR was to examine the potential effects on the need for property of UPRR denying use of its right-of-way. Chapter 3 of the 2010 document analyzes the potential for land use compatibility and property impacts, concluding that at the first tier, these impacts are significant. The 2010 Revised Program EIR analyzed the different corridors under study to determine whether there were any new land use or property impacts related to UPRR's denial of use of its right-of-way. Chapter 3 of the 2010 document explains that the Caltrain Corridor between San Francisco and San Jose is unique because the rail right-of-way is publicly owned by the Peninsula Corridor Joint Powers Board

(PCJPB), which has expressed its willingness to cooperate with the Authority on HST service on this corridor. Thus, we disagree that it is likely that the HST system would have to be relocated outside the Caltrain right-of-way. The 2010 Revised Program EIR concluded that land use impacts of the HST alternatives overall would be considered significant. Nothing about the Partially Revised Program EIR changes this significance conclusion.

40-367

Chapter 3 of the 2010 Revised Final Program EIR explains that the need to widen the size of the existing rail right-of-way in the San Francisco to San Jose Corridor to accommodate four tracks and UPRR freight operations would result in a need for property acquisition at a higher level than previously disclosed in the 2008 Final Program EIR. The 2010 Revised Program EIR concluded that land use impacts of the HST alternatives overall would be considered significant, based upon the analysis in Chapter 3. The Authority disagrees that the rail corridor would need to be relocated. Refer to Response to Comment 40-366 explaining why the Authority does not agree there is a need to locate the corridor completely outside such a publicly-owned right-of-way. The Authority has analyzed land use impacts adequately at the first tier, as described in Chapter 3 of the 2010 Revised Final Program EIR. The Authority will not make a decision on the vertical profile of the track, as the vertical profile of the track is a design detail that will be considered as part of second-tier project planning and environmental review.

40-368

Chapter 4 of the Partially Revised Draft Program EIR contains a first tier, program-level analysis of construction impacts and mitigation strategies, and concludes that construction impacts would be significant event with the application of mitigation strategies in some resource areas, including land use impacts. A detailed impacts analysis of the addition of the HST service to the Caltrain Corridor will be undertaken as part of project-level engineering and environmental analyses. It is assumed in the Program EIR that for HST alternatives using the Caltrain Corridor, HST would remain within the existing right-of-way at most locations, but some temporary construction detours for automobile traffic and shooflies

(temporary detours for railway tracks) would be necessary. The specific project design and temporary construction impacts cannot be fully assessed until additional engineering design detail is provided and the full extent of impacts cannot be understood until studies are conducted during the project-level analysis.

Potential impacts include street disruption for relocation of utilities, raising or lowering the grade of the street for a railway grade separation, temporary full or partial closure for grade separation construction or a railway shoofly, loss of on-street parking for the same reasons. Mitigations for these impacts are developed at the project level, once sufficient engineering work has been completed. Potential mitigations could include complex construction staging to minimize the size/scope of street detours/closures or railway shooflies, creation of temporary replacement parking, increased traffic control staff and devices to mitigate temporary lane reductions, educational programs to help motorists avoid construction areas, utilize temporary parking facilities, or activities to encourage patronage of affected commercial areas. Mitigations for noise during construction can include early construction of sound walls, temporary sound walls and restricted work hours. See Chapter 4 of the Partially Revised Draft Program EIR.

40-369

Please see Chapter 3.4 of the 2008 Final Program EIR and Chapter 2 of the 2012 Partially Revised Draft Program EIR. More detailed information and analysis of noise and vibration impacts on sensitive receptors and mitigation measures will be part of a project-level EIR/EIS because the determination of impact is a product of more detailed HST system design and engineering, and requires additional study at the project level. Refer also to Standard Response 3 regarding the level of detail for impacts analysis and mitigation.

The noise and vibration analysis in the 2008 Final Program EIR identified potential noise and vibration impacts on sensitive receptors or receivers, such as residences, schools, hospitals, and parklands. Chapter 3.4 also discusses the potential benefits of adding grade separations for existing railroads. Because this is a program-level environmental document, the analysis of potential noise and vibration impacts broadly compares the relative differences in

potential impacts between the alternatives and HST alignment options. General mitigation strategies are also discussed. Refer also to Response to Comment 40-271.

40-370

More detailed information and analysis of noise and vibration impacts and mitigation will be included in project-level EIR/EISs. The 2008 Final Program EIR and 2012 Partially Revised Draft Program EIR identified that the HST project would result in significant impacts on the physical environment. Mitigation for noise and vibration impacts are presented in Chapter 3.4 of the 2008 Final Program EIR and Chapter 2 of the 2012 Partially Revised Draft Program EIR, and will be further reviewed and evaluated in project-level environmental documents for selected alignments, stations, and other system facilities when more detailed information will be available regarding system engineering and design and alignment locations. Also see Chapter 3.12, Cultural Resources and Paleontological Resources in the 2008 Final Program EIR. Refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation and Response to Comment 40-365.

40-371

Refer to the Response to Comment 40-369.

40-372

Refer to the Response to Comment 40-370.

40-373

Refer to the Response to Comment 40-369. The Authority Board committed in July 2008 to investigate profile alternatives to avoid and minimize potential impacts, including trench, tunnel, aerial, and at-grade. Although the Authority has rescinded its July 2008 program decision, the commitment to examine profile alternatives is being carried forward in the project-level analyses.

40-374

Refer to the Responses to Comments 40-268 and 40-369.

40-375

Refer to the Response to Comment 40-369. The project-level noise analysis will address the noise levels with mitigation in place, including noise from other sources.

40-376

Refer to Response to Comment 40-243.

40-377

Refer to Response to Comment 40-256.

40-378

The program-level environmental process does not involve design detail sufficient to be able to determine impacts on the tree canopy along Alma Street. A second-tier analysis would require a greater understanding of the planned vertical profile of the track, a design detail that will be considered as part of second-tier project planning and environmental review. Possible avoidance or minimization of impacts on mature and heritage trees will be reviewed in detail and mitigation for any loss of trees will be developed.

40-379

The issues of noise, visual, dust, and access are discussed in Chapter 3.16 Section 4(f) and 6(f) Resources (Public Parks and Recreation) of the 2008 Final Program EIR at an appropriate level for a program-level review. More detailed analyses related to impacts on recreational resources during construction and operation will be performed during the project-level EIR/EIS analysis when more detailed design and location information will be available. Refer also to Standard Response 3 regarding the level of detail for impacts analysis and mitigation.

40-380

See Chapter 3 of the 2012 Partially Revised Program EIR and Chapters 3.1 and 2 of the 2008 Final Program EIR and the 2010 Revised Draft Program EIR Material, respectively. The analysis conducted was appropriate at the program level. The transportation

plans and policies of local jurisdictions will be reviewed and included in the project-level traffic analysis.

40-381

See Chapter 3 on traffic impacts and Chapter 4 on construction impacts of the 2012 Partially Revised Program EIR and See Chapters 3.1 and 2 of the 2008 Final Program EIR and the 2010 Revised Draft Program EIR Material, respectively. The analysis conducted was appropriate at the program level. The program-level EIR/EIS provided a general overview of construction impacts. More detailed analysis of construction impacts will be fully analyzed at the project-level EIR/EIS. Potential changes in traffic volumes on regional roadways that result from project construction and effect of the changed traffic volumes on operations of roadways and critical intersections will be evaluated. A detailed traffic analysis identifying construction-period road closures is not feasible at this stage of project development because the project design has not sufficiently progressed to determine these location-specific effects. Please refer to Response to Comment 40-265 on Partially Revised Program EIR's analysis of the potential for lane closures.

40-382

HST station-area impacts are addressed at a level of detail appropriate to the first tier Program EIR. Station-area parking and traffic impacts are discussed in Chapter 3.1 of the 2008 Final Program EIR, and Chapter 3 of the Partially Revised Program EIR. The Partially Revised Program EIR discloses that construction impacts may be significant at the program level relating to station-area traffic. A detailed analysis of traffic and potential parking impacts near HST stations and feasible mitigation measures will be included in the traffic impact analysis study at the project-level EIR/EIS. The analysis of number of parking spaces required and the placement of the parking facilities will be conducted in the project-level EIR/EIS. This information will be documented in a Traffic, Transit, Circulation and Parking Report. 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. Please refer to Responses to Comments 40-311 and 40-312 for a discussion of a Palo Alto HST station in particular.

40-383

The Partially Revised Program EIR disclosed the potential, at the program level, for adverse impacts on connecting commuter rail service, including Caltrain, related to phased implementation. Detailed analysis of traffic, circulation, parking, pedestrian and bicycle facilities and transit services will be provided at the project-level EIR/EIS. Information about rental cars will also be provided at this stage.

40-384

Refer to Response to Comment 40-383.

40-385

Detailed analysis of traffic, circulation, parking, pedestrian and bicycle facilities and transit services will be provided at the project-level EIR/EIS.

40-386

This comment is addressed in Sections 3.2 and 3.3 of the 2012 Partially Revised Draft Program EIR. Table 3-2a and Table 3-2b of the document present the 2010 and 2035 traffic conditions including traffic volumes on Monterey Highway with and without the narrowing. As seen in Table 3-2a, without the narrowing, the eight segments of Monterey Highway between Southside Drive and Bailey Road operate primarily at LOS A during the peak hours, showing mostly free-flow conditions in the corridor. Only two segments are projected to operate at LOS D during the morning peak hour, in the northbound direction.

As shown in these tables, there would be significant impacts due to the narrowing. In 2010 during the morning peak hour, two of the eight northbound segments of Monterey Highway are forecasted to have potentially significant impacts due to the narrowing. In 2035 one to five of the eight segments on Monterey Highway are projected to have potentially significant impacts, depending on the peak hour and travel direction. However, it should be noted that this

analysis does not take into account the traffic that would be diverted from the local roadway system to the HST. This diversion could reduce the aforementioned impacts. This level of analysis will be conducted at the project level and will be documented in the project-level environmental document and traffic report.

Lane narrowing that reduces a roadway's capacity to handle a particular volume of traffic will frequently result in drivers diverting to adjacent roadway facilities. As shown in Tables 3-2a and 3-2b, due to the reduction in roadway capacity, traffic volumes on Monterey Highway are projected to decrease. Section 3.3 presents the projected impacts on the surrounding street network due to the narrowing (without considering the mode-shift to HST). All roadway segments which would degrade from LOS D or better to LOS E and the roadway segments already operating at LOS E and forecasted to have 100 or more additional vehicles per hour due to the narrowing are presented in Figures 3.2-b, 3.3-b, 3.4-b and 3.5-b.

40-387

Please see Chapter 3 of the 2012 Partially Revised Draft Program EIR for a first-tier analysis of traffic impacts resulting from the loss of lanes on the San Francisco Peninsula.

40-388

Refer to Response to Comment 40-355. A reference to express trip times means no need to change trains between the cities noted. See discussion in Chapter 2 of the 2008 Final Program EIR of a route from San Jose to Oakland via Altamont alternatives. More detailed budget costs for Altamont alternatives are beyond the scope of this program EIR and more detailed station designs for San Jose will properly be considered in future project EIR/EIS analyses.

40-389

Refer to Response to Comment 40-350.

40-390

Refer to Standard Response 10, Alternatives, of the 2010 Revised Final Program EIR.

40-391

The Superior Court in the Town of Atherton cases did not find fault with the ridership forecasts or the project definition between San Francisco and San Jose. Refer to Standard Response 4 in the 2010 Revised Final Program EIR, Comments about the Ridership forecasts, and Standard Response 8 in the 2010 Revised Final Program EIR, The Authority's Business Plan (refer to Chapter 12 of the 2010 Revised Final Program EIR). The Final Program EIR includes both Pacheco Pass and Altamont Pass HST Alternatives that include direct HST service to both the East Bay and Peninsula.

40-392

Comment noted. The project-level analysis that these comments refer to is presently on hold for the section from San Francisco to San Jose. The comments from 40-392 to 40-410 are comments on the second tier Supplemental Alternatives analysis report from San Francisco to San Jose. These are not comments on any of the program EIR documents. The Authority is making every effort to respond to these comments as they may relate to the program EIR analysis.

40-393

The City's position and the guiding principles provided in the comment letter are noted. Please refer to Chapter 2 of the 2008 Final Program EIR and Standard Response 10, Alternatives, of the 2010 Revised Final Program EIR, for a discussion of the alternatives evaluation and selection process.

40-394

Comment noted. Existing Caltrain road crossings in Palo Alto are presently a mixture of grade separated and at-grade crossings. This first tier program-level analysis is designed to assist in the selection and approval of a regional network alternative including preferred alignments and station locations for future study in the project-level analysis. Once a preferred alignment is approved, vertical design options will be designed and the beneficial and adverse impacts of grade separations over the tracks will be evaluated, including potential impacts on community cohesion, land acquisition, and

traffic. For adverse impacts identified during the project-level analysis, specific mitigation measures will be provided to reduce or avoid these impacts. Please refer to Chapter 5 of the Partially Revised Draft Program EIR for a discussion of grade separations.

Please refer to Standard Response 3 regarding the level of detail required at this phase of project development and the analysis that will be undertaken for the second-tier evaluation once a preferred network alternative is approved.

40-395

The comment proposed a blended-system concept similar to that presently in development by the Authority as discussed in the 2012 Business Plan. Please refer to Standard Response 1 for additional information on the planning process for this blended system concept.

40-396

This comment relates to work that was prepared during the Preliminary Alternatives Analysis related to land acquisition and project costs, and does not appear to address the Partially Revised Final Program EIR. To the extent this comment applies to the Partially Revised Program EIR, please refer to Chapter 6 of the Partially Revised Draft Program EIR for a discussion of the staff recommendation for a preferred network alternative.

40-397

This comment relates to work that was prepared during the Preliminary Alternatives Analysis related to land acquisition and project costs, and does not appear to address the Partially Revised Draft Program EIR. To the extent this comment applies to the Partially Revised Program EIR, please refer to Chapter 6 of the Partially Revised Program EIR for a discussion of the staff recommendation for a preferred network alternative.

40-398

A preliminary evaluation of potential traffic impacts related to lane closures along Alma Street has been provided in Chapter 3 of the Partially Revised Final Program EIR. Additional information on the potential traffic and secondary impacts of any lane closures or

roadway width reductions determined to be necessary will be provided in the second-tier analysis once a preferred alignment alternative is approved. Emergency response access will be a consideration in subsequent engineering and environmental work for each alternative studied at the project level.

40-399

This appears to be a comment specific to the 2010 Preliminary Alternatives Analysis Report for the San Francisco to San Jose Section. To the extent this comment also applies to the Partially Revised Draft Program EIR, the program-level environmental process does not involve design detail sufficient to be able to determine impacts on the tree canopy along Alma Street. A second-tier analysis would require a greater understanding of the planned vertical profile of the track, a design detail that will be considered as part of second-tier project planning and environmental review. Possible avoidance or minimization of impacts on mature and heritage trees will be reviewed in detail and mitigation for any loss of trees will be developed.

Please refer to Standard Response 3 regarding the level of detail required at this phase of project development and the analysis that will be undertaken for the second-tier evaluation once a preferred programmatic alternative is approved.

40-400

Two separate comments are numbered in the comment letter as comment C.5-42. A response has been provided for each.

This first tier program-level analysis is designed to assist in the selection and approval of a regional network alternative including preferred alignments and station locations for future study in the project-level analysis. Once a preferred alignment is approved, vertical design options will be designed and the beneficial and adverse impacts of grade separations over the tracks will be evaluated, including potential impacts on community cohesion, land acquisition, and traffic. For adverse impacts identified during the project-level analysis, specific mitigation measures will be provided to reduce or avoid these impacts.

Please refer to Standard Response 3 regarding the level of detail required at this phase of project development and the analysis that will be undertaken for the second-tier evaluation once a preferred network alternative is approved.

40-401

The Authority is working with Caltrain and other transit providers to evaluate potential opportunities for a phased construction and/or a blended-system option that could reduce project costs, construction time, and local disruptions. For a discussion of this planning process, please refer to Chapter 5 of the Partially Revised Draft Program EIR and Standard Response 1.

40-402

In this program-level analysis the four-track system being evaluated along the San Francisco peninsula assumes that the four tracks would be interoperable for any type of rail service. This provides the most flexibility in rail operations and is the most conservative assumption in regards to where freight trains may operate in the corridor. Potential impacts on individual stations are possible to accommodate this shared-use system and will be evaluated in project-level engineering and environmental work once a preferred programmatic alternative alignment is selected. Chapter 3 of the Partially Revised Draft Program EIR includes an analysis of potential impacts associated with freight traffic being moved closer to neighboring land uses. The project design has not been sufficiently developed to identify precisely how freight service will operate on the corridor, but it is anticipated based on preliminary design that the infrastructure to maintain freight service in the San Francisco to San Jose Corridor can be accommodated within the project alignment studied in the 2008, 2010 and 2012 programmatic EIRs.

40-403

This comment relates to text in the Preliminary Alternatives Analysis. An extensive analysis of the potential environmental and land use impacts associated with different network alternatives and alignments is the subject of the 2008, 2010, and 2012 program-level EIRs.

40-404

This appears to be a comment specific to the 2010 Preliminary Alternatives Analysis Report for the San Francisco to San Jose Section, and the mitigation discussed in that report. To the extent this comment also applies to the Partially Revised Program EIR, the Partially Revised Final Program EIR presents general mitigation strategies that are appropriate in a program-level evaluation to indicate potential mitigation measures that can be later applied during the project-level analysis. For additional information on the appropriateness of mitigation strategies at the program-level of analysis, please see Standard Response 3.

40-405

Funding for the California High Speed Train project will come from a variety of sources. The Authority, through its business planning activities has identified local funding as one possible source of funds for paying for overall project costs.

Environmental mitigation costs are included in overall project costs and a project cost and funding evaluation study will be part of the tier 2 (project level) environmental process. As the Authority works to identify appropriate funding opportunities for its project partners including federal, state, local and private entities, "who pays for what" will be determined and considered in the funding plan.

40-406

At this level of design, no changes to local access to the Palo Alto High School have been identified, including pedestrian, bicycle and automobile access. The Authority is aware of the constraints presented by the high school and will work with the City during the project-level design phase to avoid impacts if possible if the Pacheco Pass, San Francisco via San Jose network alternative is approved as the preferred alternative.

40-407

It is not anticipated that HST-generated noise and vibration would increase noise and vibration levels such that it would render the school site unviable. The project-level noise evaluation will specifically evaluate noise-sensitive land uses along the selected

corridor, including schools and provide mitigations for any impacts identified at these locations. Please see Chapter 3.4 in the 2008 Final Program EIR and Chapter 2 in the 2012 Partially Revised Draft Program EIR. Please refer to Response to Comment 40-268.

40-408

A preliminary evaluation of potential traffic impacts related to lane closures along Alma Street has been provided in Chapter 3 of the Partially Revised Final Program EIR. Additional information on the potential traffic and secondary impacts of any lane closures or roadway width reductions determined to be necessary will be provided in the second-tier analysis once a preferred alternative alignment is approved.

40-409

Comment noted. Existing Caltrain road crossings in Palo Alto are presently a mixture of grade separated and at-grade crossings. This first tier program-level analysis is designed to assist in the selection and approval of a regional network alternative including preferred alignments and station locations for future study in the project-level analysis. Once a preferred alignment is approved, vertical design options will be designed and the beneficial and adverse impacts of grade separations over the tracks will be evaluated, including potential impacts on community cohesion, land acquisition, and traffic. For adverse impacts identified during the project-level analysis, specific mitigation measures will be provided to reduce or avoid these impacts. Please refer to Chapter 5 of the Partially Revised Draft Program EIR for a discussion of grade separations.

Please refer to Standard Response 3 regarding the level of detail required at this phase of project development and the analysis that will be undertaken for the second-tier evaluation once a preferred network alternative is approved.

40-410

Comment noted. Impacts of HST construction, operation, and maintenance on the historic homes in Palo Alto, which are listed on the National Register of Historic Places, will be further analyzed as part of the project-level EIR/EIS. A discussion of cultural resources in

or near the alternative alignments under consideration is provided in Section 3.12 in the 2008 Final Program EIR. Resource-specific cultural resources mitigation measures such as those resulting from noise, vibration, and visual intrusion will be developed as part of the project-level EIR/EIS and through the Section 106 consultation process. Under Section 106 of the National Historic Preservation Act (36 CFR § 800), the procedures to be followed at the project level include identification of resources, evaluation of their significance under the National Register of Historic Places and CEQA, identification of any substantial adverse effects, and evaluation of potential mitigation measures. Specific resources within the Area of Potential Effects will be further examined in detail at the project level because the identification of potentially affected resources and project effects and mitigation are dependent on the HST location and system design, and can only be done at the project level. Subsequent project-level environmental analysis will evaluate historic structures and districts and will consider this historic status if mitigation measures are required that would require physical alterations to such structures. Please refer to Response to Comment 40-365.

40-411

Comment noted. Responses to the comments incorporated by reference are provided. The project-level analysis that these comments refer to is presently on hold for the section from San Francisco to San Jose.

40-412

The Authority did evaluate a range of alternatives that did not rely on the UPRR's ROW. Chapter 3 of the 2010 Revised Final Program EIR evaluates a range of feasible alternatives for both the Pacheco and Altamont network alternatives that are outside of the UPRR ROW. Potential land use, agriculture, traffic, and aesthetics impacts are evaluated in Chapter 2 of the 2010 Revised Final Program EIR. Additional noise and traffic studies for the Caltrain and Monterey highway alignments are presented in this 2012 Partially Revised Final Program EIR. Air quality was not revisited as part of either of the documents due to the fact that the potential impacts are regional in nature and would not change based on the shifting of alignments.

40-413

In this programmatic phase, the Authority will be making decisions on whether to approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs. Once the preferred programmatic alignment has been approved, subsequent project-level analysis will evaluate different vertical alignment alternatives within the selected programmatic alignment. Please refer to the discussion of grade separations in Chapter 5 of the Partially Revised Draft Program EIR.

It should be noted, that the Authority placed its project-level work for San Francisco to San Jose on hold in May 2011. No decisions have been made about a second-tier project or the scope of environmental analysis in a second-tier EIR. At this time, it is anticipated that any further work on a second-tier project would have to start afresh, with a new second-tier planning and CEQA process and a new notice of preparation.

40-414

This revised description of the HST alignment in the 2010 Revised Final Program EIR clarifies that the HST tracks would be placed adjacent to, and not within, the mainline right-of-way owned by UPRR in this area. The revised project description does not result in changes to the discussion of farmland impacts as included in the May 2008 Final Program EIR, however, because that analysis already considered land beneath a road or railroad right-of-way as potential farmland, as defined by the California Department of Conservation Farmland Mapping and Monitoring Program. The placement of HST tracks adjacent to the UPRR right-of-way does not increase the level of impact. The mitigation strategies included in the May 2008 Final Program EIR include permanent protection for farmlands by securing easements or participating in mitigation banks, and coordination with local, state, federal, and private farmland protection programs. Although the Authority's decisions related to the 2008 Final Program EIR were rescinded, similar mitigation strategies are expected to be considered by the Authority in future decisions on the Partially Revised Final Program EIR, including a programmatic mitigation monitoring and reporting plan, and would be further refined and

applied in the second-tier project-level EIR/EISs as more detailed information becomes available.

40-415

This appears to be a comment specific to the 2010 Revised Program EIR, and cites text from the 2010 Revised Program EIR. Please refer to Response to Comment 40-361.

40-416

As noted in Chapter 3.7, Land Use, in the 2008 Final Program EIR, the San Francisco to San Jose Corridor would be primarily within an existing active commuter and freight rail corridor and therefore would not constitute any new physical or psychological barriers that would divide, disrupt, or isolate neighborhoods, individuals, or community focal points in the corridor. This resulted in a finding of no community cohesion impacts at the program level. In addition, construction of grade separations where none previously exist would improve circulation between neighborhood areas. The Authority Board committed in July 2008 to investigate profile alternatives to avoid and minimize potential impacts, including trench, tunnel, aerial, and at-grade between San Francisco and San Jose. Although the Authority has rescinded its July 2008 program decision, the commitment to examine profile alternatives has been carried forward into the project-level alternatives screening.

Please refer to Response to Comment 40-284.

40-417

Refer to Chapter 3, Sections 3.1 through 3.17, in the 2008 Final Program EIR where definition of each of the study corridors of each of the impact categories is discussed. See the methodologies within each of these sections for detail on study corridor widths. More detailed analysis of specific direct and indirect impacts will be included as part of project-level analyses. With respect to noise impacts in particular, please refer to Response to Comment 40-270.

Submission 41 (Marian Lee, Caltrain [Peninsula Corridor Joint Powers Board], February 21, 2012)



February 21, 2012

Mr. John Mason
CHSRA
770 L Street, Suite 800
Sacramento, CA 95814

RE: Bay Area to Central Valley High-Speed Train Partially Revised Draft Program EIR

Dear Mr. Mason,

Thank you for the opportunity to comment on the Bay Area to Central Valley High-Speed Train Partially Revised Draft Program EIR.

41-34
41-35
41-36
41-37

While we understand that the document reflects primarily the changes mandated by the court, we are compelled to state for the record that a full-build, four-track option along the Caltrain corridor is not under consideration.

We are working diligently with representatives of local communities and other stakeholders in pursuing the blended system as referenced in the draft business plan produced subsequent to the Program Level EIR. The blended system is the only approach we are willing to embrace.

Additionally, a number of the stakeholders with whom we are working have expressed a desire for an extension of the time allotted for their comments. We would appreciate it if you would give consideration to such a time extension.

We are pleased to see a discussion of the blended system concept in Section 5 and it is our intention to continue to proceed with current planning efforts in partnership with our local stakeholders.

Throughout the partially revised draft program EIR, there is continued discussion of a full-build project in the Caltrain corridor and associated impacts. As stated in our comment letter on the draft high-speed rail business plan, we are not willing to pursue a planning process that contemplates a full-build project.

If you have any questions, please feel free to contact me at leem@samtrans.com, 650-622-7843.

Sincerely,

Marian Lee, AICP
Director, Caltrain Modernization Program

Copy:
Michael Scanlon, JPB
Seamus Murphy, JPB
Dom Spaethling, Consultant to CHSRA
Katherine Strehl, Consultant to CHSRA

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Response to Submission 41 (Marian Lee, Caltrain (Peninsula Corridor Joint Powers Board), February 21, 2012)

41-34

Please refer to Standard Response 1 in this document, which discusses the planning and coordination process on-going for developing the blended-system concept.

41-35

The commenter requests that consideration be given to extend the comment period for review of the Partially Revised Draft Program EIR. The Partially Revised Draft Program EIR was circulated for public review for a period of 45 days. The Partially Revised Draft Program EIR contains information on a limited number of topics in response to the *Atherton* November 2011 court rulings (refer to Section 1.2). The Authority has determined that a 45-day review period is an adequate length of time for a complete review of the topics contained therein.

41-36

Comment acknowledged. Please refer to Standard Response 1 in this document, which discusses the planning and coordination process on-going for developing the blended-system concept.

41-37

The Authority acknowledges the concerns regarding a full-build project raised by Caltrain. Refer to Standard Response 1 for a discussion of the blended system concept.

Submission 42 (Carter Mau, San Francisco Bay Area Rapid Transit District, February 16, 2012)



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February 17, 2012

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Subject: Comments from BART on Bay Area to Central Valley Partially Revised Draft Program Environmental Impact Report

Dear Mr. van Ark:

This letter provides the comments of the San Francisco Bay Area Rapid Transit District (BART) on the Bay Area to Central Valley Partially Revised Draft Program Environmental Impact Report (Revised DPEIR) of the California High Speed Rail Authority (CHSRA). BART appreciates the opportunity to comment on this document.

42-38

Thomas M. Blalock, P.E.
VICE DIRECTOR
Lynette Sweet
VICE DIRECTOR
James Fang
VICE DIRECTOR
Tom Redorovich
VICE DIRECTOR

As you know, BART has been working with CHSRA and its consultants for several years on the planning and environmental work in two corridors – San Francisco to San Jose, and the Altamont Corridor. BART has submitted comments during scoping and also to comment on a number of prior CHSRA documents, and BART staff has consistently supported connectivity with the high speed train system.

In prior letters on the Altamont Corridor project, we have identified issues that would need to be addressed because of the geographic overlap between the Altamont Corridor project and the BART to Livermore extension. We have noted the need to ensure a viable connection between the projects in the vicinity of Livermore, and the need to recognize the difficulties in funding two major rail projects in the same corridor. In December 2009 and May 2011, we submitted letters that requested that CHSRA evaluate phasing options that could first provide improvements in the Altamont Corridor to the east of Livermore, connecting to an extended BART line in Livermore, to be followed at a later date by improvements west of Livermore as ridership increases. We have discussed this concept with your consultants on the Altamont project, but we do not yet see this concept reflected in your documents.

The Revised DPEIR does discuss several potential phasing concepts for the statewide system, for both the Pacheco Pass and the Altamont corridors. For the statewide system Altamont alternative, discussed on pages 5-7 and 5-8, CHSRA proposes a possible temporary northern terminus for the statewide system at Union City BART, with all passengers transferring at Union City to BART for regional distribution to San Francisco, Oakland, and other Bay Area destinations. Union City currently experiences

42-38

BART Comments on Bay Area to Central Valley Partially Revised Draft Program EIR
February 17, 2012

approximately 4000 entrances and 4000 exits per weekday. The figures cited in your draft document describe potentially an additional 25,000 entrances and 25,000 exits per day at this station, or a 625% increase in station usage.

If this concept advances, it will obviously require much more in-depth analysis and identification of substantial mitigations and investments for the BART system. The Revised DPEIR suggests that BART could potentially handle the additional riders by running more frequent trains with additional cars. BART is already planning for reduced headways by the Year 2035 to handle the additional future riders anticipated from the Silicon Valley Rapid Transit (SVRT) project and from background ridership growth in the region, and increasing capacity further would require substantial investments on many portions of the BART system; beyond what has already been considered to accommodate the SVRT extension and background regional growth. The document identifies some types of impacts that could be expected, but does not go far enough in anticipating the level of investment on the BART system that would be required to accommodate transfers from high speed trains at this station. Depending on the level of ridership anticipated, BART would require, at a minimum, substantial upgrades in the number of rail vehicles in the fleet, increases in station capacity, additional track capacity, additional maintenance facility capacity, upgrades to traction power and train control systems, and station access improvements. We would expect the details of these to be identified in the project-level environmental work for the Altamont Corridor.

Any temporary northern terminus at Union City is also likely to affect the Capitol Corridor operations. Consideration of the potential impacts or benefits to the Capitol Corridor should also be part of your analysis.

We look forward to working closely with the CHSRA in developing further information on this project. If you have any questions, please contact Duncan Watry in BART Planning at (510) 287-4840.

Sincerely,

Handwritten signature of Carter Mau

Carter Mau
Executive Manager, Planning and Budget

- cc: Paul Oversier, Operations
Charles Stark, TSD
Jim Gravesande, TSD
Don Allen, M&E
David Kutrosky, Capitol Corridor
Jim Allison, Capitol Corridor
Val Menotti, Planning
Marianne Payne, Planning
Malcolm Quint, Planning
Thomas Tumola, Operations Planning
Duncan Watry, Planning

Response to Submission 42 (Carter Mau, San Francisco Bay Area Rapid Transit District, February 21, 2012)

42-38

The Authority appreciates BART's participation in the planning process for the San Francisco to San Jose second-tier project, as well as for the separate Altamont Corridor Rail Project (ACRP). The Authority agrees that the HST's connectivity with other transportation systems such as BART is crucial to ensuring the mutual transportation benefits of both systems.

The first part of the comment is directed at the Altamont Corridor Rail Project, not the Program EIR for the HST project. Specifically, the comment notes BART's prior requests for a phasing option to be evaluated that would provide for the ACRP to be constructed to Livermore first, then allowing passengers to connect with BART to Livermore. Regarding the ACRP, a Supplemental Alternatives Analysis Report (SAA) is being prepared in anticipation of presentation to the Authority Board in the fall of 2012. The SAA will address phasing options specifically and the potential location(s) of connections with BART in Livermore. The SAA also will address any potential adjustments to the ACE and BART operating plans that would be required to facilitate such connections.

The Authority understands that there is a plan for Capitol Corridor trains to stop at the new Union City intermodal station in the near future, however since there is not current Capitol Corridor service at Union City this particular issue doesn't have sufficient information to be analyzed in this document. Should the Authority Board select an Altamont Pass network alternative with a final or temporary northern terminus at Union City BART at the conclusion of this Program EIR process, then second-tier, project-level analysis of such an alternative would be required, including consideration of impacts on existing transit systems such as the Capitol Corridor.

San Jose Diridon Station will most likely be a temporary northern terminal under the "Bay to Basin" step of the development of the statewide system. Under this scenario, passengers arriving from the south on the high speed train will have to transfer to a waiting

Caltrain trains to complete their journey to destinations on the Peninsula. At the project-level environmental evaluation, the Authority will further analyze potential impacts on Caltrain at San Jose Diridon Station.

As part of the regional rail service proposed by the ACRP, which is a separate project from the HST Project, the SAA will consider a BART connection at Union City and clarify how this interface would function. The impacts of the ACRP on Union City Station and BART system operations would be determined as part of a future project-level environmental analysis for the ACRP.

Submission 45 (John Ristow, Santa Clara Valley Transportation Authority, February 21, 2012)



3956
02-21-12P02:25 RCVD



February 14, 2012

Mr. John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Bay Area to Central Valley IIST Partially Revised Draft Program EIR Comments

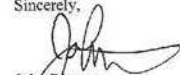
Dear Mr. Mason,

45-53 | Santa Clara Valley Transportation Authority (VTA), the Congestion Management Agency (CMA) and transit operator for Santa Clara County, has reviewed the Bay Area to Central Valley HST Partially Revised Draft Program EIR. As stated in our letter of April 9, 2010, VTA strongly supports the project and the recommended Bay Area alignment which includes the Pacheco Pass alignment as the preferred alternative – the alignment through Gilroy with a station running parallel to the UPRR corridor and joining the Caltrain right-of-way from San Jose to San Francisco.

45-54 | The Partially Revised Draft Program EIR addresses the Court ruling that the original and revised EIR did not adequately address a number of issues and should be used as a basis to complete a Project level EIR and EIS.

Thank you for the opportunity to review the program level EIR. We look forward to reviewing the project level transportation impact analysis in the future. In the meantime, VTA will continue to work with the Authority and our local cities to implement the Project.

Sincerely,


John Ristow
Chief CMA Officer

3331 North First Street • San Jose, CA 95134-1927 • Administration 408.321.5555 • Customer Service 408.321.2300

April 9, 2010

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

Subject: Bay Area to Central Valley Revised Draft Program-Level EIR

Dear Mr. Leavitt,


Santa Clara Valley Transportation Authority (VTA), the Congestion Management Agency (CMA) and transit operator for Santa Clara County, strongly supports the findings in the Revised Draft Program EIR for the Bay Area to Central Valley segment of the High-Speed Train Project which recommends the Pacheco Pass alignment as the entry point of the High-Speed Train system into the Bay Area. The recommended alignment through Gilroy, with a station, parallels Union Pacific Railroad (UPRR) tracks without using operating right-of-way and then joins the Caltrain right-of-way at San Jose Diridon Station. This best serves the travel needs of Santa Clara County by connecting the job centers of Silicon Valley with the statewide high speed rail network.

The Revised Draft Program EIR addresses Judge Kenny's ruling, that the original EIR did not adequately describe the alignment between Gilroy and San Jose. The revised project description parallels portions of the Union Pacific alignment in south Santa Clara County but will not use UPRR's operating right-of-way, instead using portions of the current Monterey Highway right-of-way. The Revised Draft Program EIR also addresses issues raised by UPRR regarding potential impacts to their freight operations.

The cooperative process between the California High-Speed Rail Authority, VTA, and the Cities of San Jose, Morgan Hill and Gilroy to identify a viable alignment through south Santa Clara County demonstrates the commitment the local governments of the County have to the Project and the spirit of the ongoing relationship we have with the Authority as we collectively continue to address the many challenging issues that are ahead of us.

VTA will continue to work with the Authority and our local cities to implement the Project and recommends the Authority, once again, affirm its support for the Pacheco Pass alignment and approve the Revised Draft Program EIR.

Sincerely,


John Ristow
Chief CMA Officer

3331 North First Street • San Jose, CA 95134-1927 • Administration 408.321.5555 • Customer Service 408.321.2300

Response to Submission 45 (John Ristow, Santa Clara Valley Transportation Authority, February 21, 2012)

45-53

The VTA's continued support for the HST project and the Pacheco Pass alignment via Gilroy and San Jose is noted.

45-54

Comment acknowledged.

Submission 49 (David Warner, San Joaquin Valley Air Pollution Control District, February 21, 2012)



February 21, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

**Project: Bay Area to Central Valley HST Partially Revised Draft Program EIR
Comments**

District CEQA Reference No: 20120027

Dear Mr. Mason:

49-431

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of partial revisions to the draft Program Environmental Impact Report for the Bay Area to Central Valley High-Speed train project in CA, specifically addressing the San Francisco to San Jose section. The District has no comments at this time.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call Patia Siong at (559) 230-5930.

Sincerely,

David Warner
Director of Permit Services


Arnaud Marjollet
Permit Services Manager

DW:ps

cc: File

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4900 Estabrooke Way
Madison, CA 95356-8718
Tel: (209) 957-6400 FAX: (209) 557-6475

Central Region (Main Office)
1000 E. Getvalburg Avenue
Fresno, CA 93729-0244
Tel: (559) 230-8000 FAX: (559) 230-8051

Southern Region
34546 Pioneer Court
Bakersfield, CA 93309-9725
Tel: 801-352-5500 FAX: 801-352-5555

www.valleyair.org www.healthyliving.com

Printed on recycled paper.

Response to Submission 49 (David Warner, San Joaquin Valley Air Pollution Control District, February 24, 2012)

49-431

Comment acknowledged. The section teams will engage with District staff during the project-level EIR/EIS process.

Submission 50 (Brandt Grotte, City of San Mateo, February 21, 2012)



OFFICE OF THE CITY COUNCIL

February 21, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Attn: Bay Area to Central Valley HST Partially Revised Program EIR Comments

Dear Mr. Mason:

The City of San Mateo submits the following comments on the *Partially Revised Draft Program Environmental Impact Report (EIR)* prepared for the high speed rail project.

330 West 20th Avenue
San Mateo, California 94403-1388
Telephone: (650) 522-7048
Fax: (650) 522-7041
TDD: (650) 522-9047
www.cityofsanmateo.org

- 50-168 • The *Partially Revised Draft Program EIR* is based upon information presented in the Supplemental Alternatives Analysis. The Supplemental Alternatives Analysis assumes only an elevated alignment option south of SR 92. The City of San Mateo City Council has requested the analysis of a below grade alignment option for this segment. The evaluation of the underground option must be included in the Project Level Environmental Impact Report. It is important to understand how potential noise and vibration impacts might be mitigated with a below grade option.
- 50-169 • Closure of one lane on Railroad Avenue between Mt. Diablo and 3rd Avenue in San Mateo would have significant and irreversible access impacts to adjacent businesses. We believe that these impacts can best be addressed through a covered trench alignment in the area under a Blended System that is limited to two tracks in this narrowest portion of the Caltrain Corridor.
- 50-170 • Closure of one lane on Pacific Boulevard near the Hayward Park Caltrain Station would have significant impacts on our Rail Corridor Transit Oriented Development Plan, would limit access to the Hayward Park Station and could limit the intensity of development planned in the area.
- 50-171 • Closure of one lane on Pacific Boulevard near the Hayward Park Caltrain Station would also restrict access into the City's Corporation Yard which relies on Pacific Boulevard as its sole access route.
- 50-172 • The development of the Bay Meadows site includes connecting Pacific Boulevard to Delaware Street adjacent to the Hillsdale Station. Closure of lanes on Pacific Boulevard near Hillsdale Boulevard will adversely impact this new parallel route to El Camino Real. In addition the new connection between Pacific Boulevard and Delaware Street will provide a new "Main Street" for the transit oriented development being constructed on the Bay Meadows site.

- John Mason
High Speed Rail Authority
Bay Area to Central Valley HST Partially Revised Program EIR Comments
Page 2 of 2
- 50-173 • Potential impacts to Pacific Boulevard and its interchange with Hillsdale Boulevard could result in significant land use impacts that are unacceptable to the City and are not adequately evaluated in the *Partially Revised Draft Program EIR*.
 - 50-174 • Level of service impacts at the El Camino interchange with Hillsdale Boulevard will adversely impact the Hillsdale Shopping Center and any normal congestion impacts will be exacerbated during the holiday shopping season.
 - 50-175 • The Supplemental Alternatives Analysis included creation of two new grade separations and relocation of the Hillsdale Station north to better serve the transit oriented development under construction on the former Bay Meadows site. It is extremely important that these grade separations are retained as part of the high speed rail plan. The City is setting aside funds to partially offset the additional costs of these new grade separations.
 - 50-176 • The City of San Mateo is supportive of current efforts to evaluate phased implementation and the Blended System and looks forward to more information regarding the feasibility, impacts and benefits of this promising approach.
 - 50-177 • The City of San Mateo appreciates the expanded review of noise and vibration impacts of the proposed high speed rail system. However, the level of analysis provided in the Program EIR is insufficient. We remain concerned regarding the potential noise and vibration impacts on our residents and businesses.
 - 50-178 • We recognize that there will be impacts that result from construction of a massive project like that proposed with high speed rail. We encourage the Authority to work with local agencies to review construction methods and how best practices can reduce the impacts of the project on our residents and businesses.
 - 50-179 • The *Partially Revised Draft Program EIR* indicates that grade separations constructed as part of the high speed rail project may result in significant and unavoidable impacts. The City believes that grade separations will likely also have beneficial safety, traffic and other impacts.

50-517 The City of San Mateo understands that the *Partially Revised Draft Program EIR* was prepared based on the Supplemental Alternatives Analysis for the San Jose to San Francisco segment and does not fully reflect subsequent design efforts to reduce project impacts and does not reflect phased implementation and the Blended System as envisioned in the 2012 Business Plan. We look forward to participating in the current process initiated by high speed rail and Caltrain to evaluate the Blended System.

Sincerely,
CITY OF SAN MATEO

Brandt Grotte, Mayor

Q:\pwp\WENGA_AR\High Speed Rail AR\02-21-12 Comment Letter (3).docx

Response to Submission 50 (Brandt Grotte, City of San Mateo, February 23, 2012)

50-168

The Partially Revised Draft Program EIR identified potential lane reductions on very preliminary design as provided in the San Francisco to San Jose Supplemental Alternatives Analysis for the second-tier project in this section. In this programmatic phase, the Authority will be making decisions on whether to approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs. Once the preferred programmatic alignment has been approved, subsequent project-level analysis will evaluate different vertical alignment alternatives within the selected programmatic alignment. As the comment notes, some vertical alignments may reduce or increase potential noise or vibration impacts in comparison to other vertical alignments. Please refer to Response to Comment 40-279 for a discussion of how this will be assessed during the project-level analysis.

It should be noted, that the Authority placed its project-level work for San Francisco to San Jose on hold in May 2011. No decisions have been made about a second-tier project or the scope of environmental analysis in a second-tier EIR. At this time, it is anticipated that any further work on a second-tier project would have to start afresh, with a new second-tier planning and CEQA process and a new notice of preparation.

50-169

The Partially Revised Program EIR recognizes that if it is found in subsequent design phases that closure of Railroad Avenue is necessary, new access would have to be planned for the businesses and homes that front Railroad Avenue. If access cannot be provided, the parcels that use this parking and access would no longer be considered viable and may need to be acquired by the HST project. The analysis also notes that possible lane closures may be avoided through design refinements that result in adjustments to the vertical alignments, including having the vertical alignment for the rail corridor lowered into a trench with the road continuing to operate above the depressed rail corridor.

For more information on the planning process for the blended-system concept, please refer to Standard Response 1 in this document.

50-170

The analysis of the closure of one lane of Pacific Boulevard near the Hayward Park Caltrain Station did not identify any significant traffic impacts. However, the analysis does recognize that out-of-direction travel would occur if Pacific Boulevard were converted to one-way. As the analysis notes, the street system in the area could likely accommodate the change in circulation patterns without other secondary effects.

50-171

The analysis of the closure of one lane of Pacific Boulevard near the Hayward Park Caltrain Station did not identify any significant traffic impacts. The conversion of Pacific Boulevard from two-way to one-way will require that certain trips, depending on their origin and their destination, experience out-of-direction travel as noted in the analysis. Since the City's Corporation Yard uses Pacific Boulevard, out-of-direction travel will be experienced for some trips to and from the Corporation Yard if this alignment were selected and if this lane closure could not be avoided.

50-172

The Partially Revised Draft Program EIR identified potential lane reductions on very preliminary design as provided in the San Francisco to San Jose Supplemental Alternatives Analysis. The loss of up to four lanes on Pacific Boulevard at the Hillsdale Boulevard interchange would affect the current geometric configuration of the Pacific Boulevard/Hillsdale Boulevard interchange. As stated in the traffic analysis, the existing interchange could be rebuilt farther east as an at-grade intersection. The connection between Pacific Boulevard and Delaware Street could still be made.

It is understood that the City has concerns regarding the loss of roadway capacity and the Authority will work to refine the project design to avoid lane closures where feasible. The analysis provided in this Partially Revised Draft Program EIR was completed to identify at a program-level potential traffic impacts if lane reductions were to in fact occur. Impacts associated with the loss of lanes will be evaluated in greater detail in the project-level EIR if such lane reductions are determined to be required. This will include a more detailed assessment of access and secondary impacts associated with changes in traffic patterns. This evaluation will include existing, and reasonably foreseeable projects, including those presently under construction.

50-173

The Partially Revised Draft Program EIR analyzed potential lane closures and describes the potential for circulation, access or parking impacts, and describes potential land use implications resulting from mitigation for circulation and parking impacts. The degree of impacts on land use in the vicinity of Pacific Boulevard/Hillsdale Boulevard is not known at this time. If lane reductions on Pacific Boulevard are ultimately required, engineering design would be undertaken to determine the replacement intersection configuration and its effect on land use. During this design effort a key design guideline would be to minimize land use impacts. Since the impacts on land use of potential lane closures are not fully known at this time, the Partially Revised Draft Program EIR identified it as a possible significant impact. Please refer to Response to Comment 40-172 for additional discussion of the project-level design refinement that would occur in the project-level EIRs.

50-174

As documented in the traffic analysis (Chapter 3) of the Partially Revised Draft Program EIR, the modification to Pacific Boulevard to a one-way street would result in a significant traffic impact for the El Camino Real/Hillsdale Boulevard interchange in 2035. The traffic analysis and the significance determination were based upon AM (morning) and PM (evening) peak hour V/C and LOS calculations. Temporary or seasonal phenomena, such as sporting events or holiday shopping, are not part of the standard methodology.

Potential design practices that might avoid and minimize the effects of the potential loss of traffic lanes, and potential mitigation strategies to avoid or lessen impacts, are discussed in the Partially Revised Program EIR. If the loss of lanes is determined to be required, the project-level analysis could include an analysis of seasonal traffic conditions if such an analysis is determined to be required. Such issues will be identified and resolved in the scoping process for the project-level document. Please refer to Response to Comment 40-172 for additional discussion of the project-level design refinement that would occur in the project-level EIRs.

50-175

Comment noted. In this programmatic phase, the Authority will be making decisions on whether to approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs. Once the preferred programmatic alignment has been approved, subsequent project-level analysis will evaluate different vertical alignment alternatives within the selected programmatic alignment, including what grade separations may be required.

50-176

The comment indicating support for the blended system approach and phased implementation is acknowledged. Please refer to Standard Response 1 for more discussion of the Draft and Revised 2012 Business Plan, the blended system approach, and how such an approach may be incorporated into a future second-tier project and EIR/EIS for an alignment on the Caltrain Corridor, if such an alignment is part of the network alternative that the Authority Board selects at the outcome of this Program EIR process.

50-177

The program-level analysis follows FRA- and FTA-approved noise and vibration methodologies that are intended to indicate the "level" of impact and not specific impacts. A more detailed evaluation of specific impacts at particular locations will be included as part of second-tier, project-level work. The project analysis will evaluate in detail noise and vibration impacts using the appropriate methodologies of the FRA and FTA. The general noise and vibration

mitigation strategies included in this document will be refined and included in the second-tier EIR/EIS.

Please refer to Chapter 3.4 of the 2008 Final Program EIR, which discusses the project-level noise and vibration evaluation in greater detail. Mitigation measures will be evaluated in the project-level evaluation to mitigate potential impacts identified at specific sensitive receptor locations. Also refer to Standard Response 3 regarding program level of detail.

50-178

Comment acknowledged. The Authority is committed to working with all local, regional, and state agencies at the second tier of project planning, environmental review, and implementation to ensure construction methods can reduce impacts on local communities to the maximum extent feasible. Text has been added to Chapter 4 to reflect this additional mitigation strategy for consideration by the Authority Board.

50-179

The Authority agrees that grade separations would result in many beneficial impacts. The text of Chapter 5 is revised to reflect this point more clearly.

50-517

The Authority will continue to work with all jurisdictions in the state regarding the development of the HST Project. Refer to Standard Response 1 for additional information regarding the blended system concept and phase implementation.

Submission 51 (Jeffrey V. Smith, County of Santa Clara, February 21, 2012)

County of Santa Clara

Office of the County Executive

County Government Center, East Wing
70 West Hedding Street
San Jose, California 95110
(408) 299-5105



February 20, 2012

Mr. John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

RE: Comments regarding the Partially Revised Draft Program Environmental Impact Report - Bay Area to Central Valley High-Speed Train (HST)

Dear Mr. Mason:

Please find enclosed comments from the County of Santa Clara regarding the Bay Area to Central Valley High-Speed Train Partially Revised Draft Program Environmental Impact Report, dated January 2012. These include comments from the Departments of Planning and Development, Parks and Recreation, Roads and Airports, and Land Development Engineering.

The attached comments highlight several comments and concerns the County has regarding the proposed Bay Area to Central Valley alignment of the proposed High Speed Train (HST) and its impact upon County resources, residents, and facilities, including County parks, roadways, and implementation of the Santa Clara Valley Habitat Conservation Plan (HCP).

If you have any questions regarding coordination of comments on the Partially Revised Draft Program EIR from the County, please contact Rob Eastwood at (408) 299-5792 in the County Department of Planning and Development, Jane Mark at (408) 355-2237 in the Department of Parks and Recreation, or Dawn Cameron at (408) 573-2465 in County Roads and Airports.

Sincerely,

for Jeffrey V. Smith
County Executive

Cc: Santa Clara County Board of Supervisors

Board of Supervisors: Mike Wasserman, George Shirokawa, Dave Coriase, Ken Yeager, Liz Niles
County Executive: Jeffrey V. Smith



Submission 51 (Jeffrey V. Smith, County of Santa Clara, February 21, 2012) - Continued

County of Santa Clara

Department of Planning and Development
Planning Office
County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org



February 20, 2012

Mr. John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Comments regarding the Partially Revised Draft Program
Environmental Impact Report for the Bay Area to Central Valley
High-Speed Train

Dear Mr. Mason:

The County of Santa Clara Department of Planning and Development appreciates the
opportunity to review the Partially Revised Draft Program Environmental Impact Report
(EIR), dated January, 2012. The Partially Revised Draft Program EIR provides
additional information and clarifications for the 2010 Revised Final Program EIR - Bay
Area to Central Valley High Speed Train (HST) Final Program EIR/EIS. After review of
the Partially Revised Draft Program EIR, the County of Santa Clara Department of
Planning and Development has the following comments:

51-200

Habitat Conservation Plan

1. The County of Santa Clara anticipates adoption of the Santa Clara Valley Habitat
Conservation Plan (HCP) in 2012. Although the HCP is not yet public, the Partially
Revised Draft EIR should reference the Santa Clara Valley HCP in regards to biological
goals, values and conservation strategy. Information regarding the HCP can be found at
http://www.scv-habitatplan.org

51-201

Noise and Vibration Mitigation Measures

2. The Partially Revised Draft Program EIR provides mitigation measures for noise and
vibration impacts (page 2-9) with the shift of Monterey Highway and the potential to
move freight train tracks closer to adjacent land uses. The mitigation measures include
traffic management measures for Monterey Highway, including vehicle speed limits and
vehicle type limitations, and working with the City of San Jose to establish appropriate
traffic management measures to reduce Monterey Highway traffic noise. It is
recommended the County of Santa Clara Department of Environmental Health, Roads
and Airports, and Planning and Development be consulted when developing traffic
management measures to establish appropriate traffic management measures to reduce
traffic noise on Monterey Highway.

51-518

Future Project-Level Environmental Analysis:

While the Bay Area to Central Valley 2010 Revised Final Program EIR and 2012
Partially Revised Draft Program EIR are programmatic in nature, future tiered, site-
specific project level environmental documents will assess the impacts of construction
and implementing individual HST projects. As discussed in County comments for the
Notice of Preparation (NOP) for the San Jose to Merced High Speed Train System
through Pacheco Pass, dated April 10, 2009, future project-level environmental analysis
should address the following:

51-202

3. Agricultural Resources: Discuss the impacts of the loss of agricultural land, loss of
prime farmland, and impacts on land under Williamson Act Contract or commercial
agricultural production as a result of the proposed project.

51-203

4. Noise: Evaluate noise impacts on adjacent properties using the County of Santa Clara
Noise Ordinance and County General Plan Policies as thresholds of noise significance.

51-204

5. Scenic Rural Roads: Evaluate visual impacts of the proposal on County designated
scenic roads.

51-519

Again, we appreciate the opportunity to review and provide these comments on the Bay
Area to Central Valley High-Speed Train Revised Draft Program EIR/EIS Material. We
look forward to reviewing any responses and revisions to the document, as well as any
future project level environmental documents, when they become available. If you have
any questions regarding these comments, please do not hesitate to contact Rob Eastwood,
Planning Office, at (408) 299-5792, Kim Rook, Planning Office, at (408) 299-5790, Jane
Mark, Parks & Recreation Department, at (408) 355-2237, or Dawn Cameron, Roads and
Airports, at (408) 573-2465.

Sincerely,

[Handwritten signature of Ignacio Gonzalez]

Ignacio Gonzalez
Director
Department of Planning and Development
County of Santa Clara

cc:
Carolyn Walsh, Planning Office
Rob Eastwood, Planning Office
Jane Mark, Parks & Recreation Dept.
Dawn Cameron, Roads & Airports
Darrell Wong, Land Development Engineering

Board of Supervisors: Mike Wasserman, George Shikawa, Dave Cortese, Ken Yonger, Liz Krass
County Executive: Jeffrey V. Smith



Submission 51 (Jeffrey V. Smith, County of Santa Clara, February 21, 2012) - Continued

County of Santa Clara
Roads and Airports Department



101 Shoppell Drive
San Jose, California 95110-1502
(408) 573-2400

February 15, 2012

Mr. John Mason
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Partially Revised Draft Program Environmental Impact Report -
Bay Area to Central Valley High Speed Rail

Dear Mr. Mason,

The partially revised Draft Program EIR for the subject project has been reviewed. Our comments are as follows:

51-205

1. The analysis of the impacts of the proposed one lane reduction on eastbound Central Expressway near Rengstorff Avenue is not adequate. Table 3-1a Level of Service (LOS) calculations need to include Arterial Delay LOS methodology for the proposed reduction of one through lane. Also, the peak hour directional count for eastbound Central Expressway as shown in Table 3-1a on page 3-10 is low compared to the approved county Santa Clara County submitted to the Congestion Management Agency (CMA) in the 2010 Congestion Management Program (CMP) Monitoring Report.

51-206

2. The proposed capacity reduction of Monterey Highway from 6 to 4 lanes (Figures 3-2a through 3-5b) will cause significant impacts on Capitol Expressway, Almaden Expressway, the County's portion of Monterey Highway, and Santa Teresa Boulevard. Further detailed analysis is needed to determine the impact mitigation required to improve these corridors/intersections to their initial capacity before the implementation of the proposed project.

51-207

3. Transportation impact mitigation projects and strategies should be consistent with Santa Clara County's *Comprehensive County Expressway Planning Study - 2008 Update*, adopted by the Board of Supervisors in March 2009. Mitigations should also be consistent with the *South County Circulation Study*, adopted by the VTA Board of Directors in April 2008.

If you have any questions, please contact me at 408-573-2465.

Sincerely,

Dawn S. Cameron
County Transportation Planner

cc: MA, TP, MLG, RN, File

Board of Supervisors: Mike Vissersman, George Shirahawa, Dave Cortese, Ken Yeager, Liz Mills
County Executive: Jeffrey V. Smith

BB

Submission 51 (Jeffrey V. Smith, County of Santa Clara, February 21, 2012) - Continued

County of Santa Clara
Department of Planning and Development
County Government Center, East Wing
70 West Hedding Street, 7th Floor
San Jose, California 95110



Table with 5 columns: Phone, Administration, Development Services, Fire Marshal, Planning. Includes contact numbers for each department.

Via USPS

February 9, 2012

California High-Speed Rail Authority
770 L Street, Suite #800
Sacramento, CA 95814

Attention: Mr. John Mason

Applicant: Lands of California High-Speed Rail Authority

Road Name: Santa Clara County Rail Improvements

Dear Mr. Mason;

This letter is in response to your 2012 Bay Area to Central Valley HST Partially Revised Draft Program EIR - Complete, prepared by the California High-Speed Rail Authority, and dated January 2012. This letter discusses floodplain, grading, and drainage, and storm water quality issues only. Other letters from Santa Clara County may be forthcoming.

Floodplain Issues:

This project is partially inside and partially outside the floodplain areas identified on the 2009 Federal Emergency Management Agency (FEMA) Floodplain maps. Though Volume 1: 2008 Bay Area to Central Valley HST Final Program EIR - Section 3.14: Hydrology and Water Resources discusses floodplain effects in a general way, no discussion of specific floodplain effects and mitigations appear in the above 2012 Draft EIR. Specific discussions and mitigations are necessary. A separate Hydrology and Hydraulic Report, speaking to the encroachment of the proposed improvements on the Floodplain, is required and mitigations incorporated into the 2012 EIR.

A Development Permit from the Santa Clara County Floodplain Administrator is required prior to starting construction within unincorporated Santa Clara County. Conditional Letter of Map Revision and Letter of Map Revision may be required.

Grading, Drainage, and Storm Water Quality Issues:

As the California High-Speed Rail is another governmental taking full responsibility for all grading improvements, this project is considered exempt from the Santa Clara County Grading Ordinance.

The 2008 EIR speaks in general terms about stormwater quality and conformance with Municipal Regional Permits issued by both the San Francisco Bay Regional Water Quality Control Board and the Central Coast regional Water Quality Control Board. At that time, the EIR is unclear as to how the project will meet the requirements of the two Municipal Regional

Board of Supervisors: Mike Wasserman, George Shirakawa, Dave Cortese, Ken Yeager, Liz Kalls
County Executive: Jeffrey V. Smith

51-210

Ms. John Mason - California High-Speed Rail Authority
February 9, 2012
Page 2 of 2

Permits. Please update these sections and provide specific effects and mitigations with regards to stormwater quality issues.

If you have any questions about this letter, please call me at phone (408) 299-6732.

Sincerely,

Handwritten signature of Christopher Freitas

Christopher Freitas, P.E.
Senior Civil Engineer

CF:cf

- Co: Darrell Wong - Land Development Engineering Office
Scott Johnson - Building Office
Michael Harrison - Floodplain Administrator
Nash Gonzalez - Planning & Development Services Director

51-208

51-209

51-210

Submission 51 (Jeffrey V. Smith, County of Santa Clara, February 21, 2012) - Continued

County of Santa Clara
Parks and Recreation Department

298 Quaden Hill Drive
Los Gatos, California 95032-7669
(408) 355-2200 FAX 355-2290
Reservations (408) 355-2201
www.parkhere.org



February 16, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Attn: Bay Area to Central Valley HST Partially Revised Draft Program EIR Comments

Dear Mr. Mason,

The County of Santa Clara Parks and Recreation Department (County Parks) appreciates the opportunity to review the Bay Area to Central Valley HST Partially Revised Draft Program EIR. County Parks previously provided comments on the Revised Draft Program EIR for the Bay Area to Central Valley High Speed Train, April 23, 2010, and the June 2010 Preliminary Alternatives Analysis Report for the San Jose to Merced Section, September 8, 2010.

51-520 County Parks concerns regarding the proposed Bay Area to Central Valley HST project are focused upon potential impacts to regional parks resources including natural resources, and upon trails and other recreational facilities. County parklands contain a number of sensitive and protected species and habitats, and County Parks is charged with the responsibility to provide, protect and preserve regional parklands including management of these natural resources.

51-211 The San Jose to Central Valley HST corridor would potentially impact a number of County parks, resources, trails and recreation facilities and most directly Coyote Creek Parkway County Park (Coyote Creek Park). Potential impacts to Coyote Creek Park would result from implementation of the HST along Monterey Highway particularly from the shifting and/or narrowing of Monterey highway. These include loss of or encroachment upon riparian habitat, potential noise and vibration related impacts, construction-related impacts, and potential encroachment and/or take of parkland.

51-521 While the revised program EIR provides additional information and clarification regarding potential noise, vibration and construction related impacts and mitigation strategies, the Revised Draft Program EIR/EIS should address and propose mitigations for:

- 51-212 • Potential impacts to Coyote Creek Park and the riparian corridor it contains; and
- Potential taking of County Parkland : As per Public Park Preservation Act of 1971, a voter-approved County Charter Amendment and Code of Civil Procedures Section 1240.680, the County would need to evaluate and assess all projects with the potential to encroach upon, take and/or impact County parklands; and
- 51-213 • Strategies to comply with Section 4(f) regulations [23 Code of Federal Regulations 774.5 (a)] and Section 6(f) Land and Water Conservation Fund Act of 1965 [Public Law 88-578, 16 U.S.C. Section 4601-4-4601-11]



Board of Supervisors: Mike Wasserman, George Shinkawa, Dave Cortese, Ken Yeager, Liz Kniss
County Executive: Jeffrey V. Smith

51-522

Future tiered project-level environmental documents for the Bay Area to Central Valley HST, including mitigation strategies/measure should discuss and consider potential impacts to County parklands, park resources and recreation facilities related to:

51-214

- Land Use & Policies: Impacts to parks, trails and recreation in accordance with the Parks and Recreation Element of the County of Santa Clara General Plan (1990-2010) and the Santa Clara County Countywide Trails Master Plan Update (1995);

51-215

- Land Use & Policies: Should address analysis and compliance with the Coyote Creek Parkway Integrated Natural Resource Management Plan and Master Plan (March 2007), which is a locally-adopted land use plan for a County park facility.

51-216

- Property Taking of County Parkland: As per Public Park Preservation Act of 1971, a voter-approved County Charter Amendment and Code of Civil Procedures Section 1240.680, the County would need to evaluate and assess all projects with the potential to encroach upon, take and/or impact County parklands. Furthermore, County Parks is required to evaluate environmental analysis of any project which may impact parklands. Thus the project-level EIR/EIS should discuss potential environmental impacts to County parks, trails, and parklands that are located within the vicinity of the proposed project, that include Coyote-Helleyer, Motorcycle, Anderson Lake, and Coyote Creek Parkway County Parks.

51-217

- Riparian Resources: Coyote Creek Parkway County Park is one of the regional parks and recreational resources directly impacted by the proposed San Jose to Merced High Speed Train corridor. In addition, Coyote Creek Parkway County Park is an outstanding example of a regionally significant riparian habitat that provides a valuable wildlife movement corridor for numerous sensitive species. County parklands contain a number of sensitive and protected species and habitats, as identified in the Coyote Creek Parkway County Park Natural Resource Management Plan and Master Plan, approved in 2007. In addition, County is under the regulatory oversight of local, federal and state agencies, such as the Santa Clara Valley Water District, the National Marine Fisheries Services (NOAA), necessitating that we conduct additional review of projects that may impact these resources or that require enhancement of habitats that exist in County parklands.

Again, County Parks appreciates the opportunity to review and provide comments on the Bay Area to Central Valley HST Partially Revised Draft Program EIR. We look forward to reviewing future project level environmental documents.

Sincerely,

Elish Ryan
Planner III, Acting Senior Planner
Parks and Recreation Department

Cc: Julie Mark, Deputy Director
Antoniette Romeo, Park Planner
Rob Eastwood, Principal Planner, County Planning Department



Board of Supervisors: Mike Wasserman, George Shinkawa, Dave Cortese, Ken Yeager, Liz Kniss
County Executive: Jeffrey V. Smith

Response to Submission 51 (Jeffrey V. Smith, County of Santa Clara, February 23, 2012)

51-200

Comment acknowledged. The plans identified in the comment were considered in Chapter 5 of the 2012 Partially Revised Final Program EIR and determined not to raise new environmental impact issues at the program level.

51-201

Chapter 2 of the Partially Revised Draft Program EIR has been revised to state that both the City of San Jose and Santa Clara County will be consulted at the project level when developing traffic management measures to reduce traffic noise on Monterey Highway.

51-518

Comment acknowledged. Refer to Standard Response 3 regarding the level of detail to be provided in the program and project-level tiered documents.

51-202

Comment acknowledged. Future second-tier, project-level EIRs will include an analysis of potential impacts on agriculture land, including direct and indirect conversion of important farmlands (prime, statewide important, and unique), lands under Williamson Act and Farmland Security Zone contracts, and impacts on commercial agricultural production

51-203

Project-related noise assessment (rail operations) will follow the FRA guidance manual on noise analysis and the vibration analysis will follow the FTA guidance for vibration analysis. Federal Highway Administration guidance will be followed for operational noise traffic sources.

Second-tier project-level non-HST sources, such as stations, maintenance facilities, and construction noise assessment will be based on guidelines included in the FTA guidance manual (FTA 2006), as well as consideration of local noise ordinances, which

would include the Santa Clara County Noise Ordinance. The Authority applies uniform noise and vibration criteria for construction based on FTA guidance. The Santa Clara County General Plan defers to the noise thresholds identified in the County Noise Ordinance.

51-204

Comment acknowledged. Future, second-tier project-level EIRs will include an analysis of potential impacts on County-designated scenic roadways.

51-519

Comment acknowledged.

51-205

The portion of Central Expressway where the loss of a travel lane may occur is between San Antonio Road and Rengstorff Avenue, as identified in Chapter 3 of the Partially Revised Final Program EIR (specifically, Tables 3-1a through 3-1d analyze potential lane closures) San Antonio Road at Central Expressway is currently grade separated and Rengstorff Avenue at Central Expressway and Castro Street at Central Expressway will be grade separated by the HST project. These grade separations will remove the signalized intersections for this area of Central Expressway. The 2000 Highway Capacity Manual Urban Street Methodology specifies signal spacing of two miles or less. Intersection delay is used in the calculation of level of service which is based on average travel speed along the arterial. According to VTA's Traffic LOS Guidelines, the LOS for urban arterials is determined by traffic signal operations, but if the traffic signals spacing is greater than two miles, this methodology cannot be applied. Instead, the analysis for the Partially Revised Program EIR considered a basic volume to capacity ratio analysis and found that a significant impact would not occur as a result of removing one travel lane of eastbound Central Expressway.

The traffic counts used in the analysis were intersection turning movement counts conducted in September 2009 at the intersection of Central and Rengstorff for the beginning of the project-level traffic analysis. The comment does not indicate by how much the traffic volumes are lower than recent counts conducted by the County, however, traffic volumes vary from day to day and can fluctuate by 10 percent or more.

51-206

The impact of Monterey Highway narrowing on surrounding streets, and on Monterey Highway itself, is discussed in Chapter 3 of the Partially Revised Final Program EIR. Table 3-2a and Table 3-2b analyze traffic congestion impacts on Monterey Highway itself. Figures 3-2b, 3-3b, 3-4b, and 3-5b identify segments in the surrounding street network projected to operate under congested conditions. These figures include depictions of Capitol Expressway, Almaden Expressway, and Santa Teresa Boulevard, the roadways identified in the comment. The Partially Revised Final Program EIR discloses that the narrowing of Monterey Highway is considered a significant traffic impact on the surrounding street network, and mitigation strategies are discussed. A more detailed traffic analysis will be conducted at the project-level and the results will be presented in the project-level traffic report. The project-level traffic report will determine the combined effect of both the mode shift to the HST system and the proposed narrowing of Monterey Highway on the surrounding street system. The results of the analysis will be documented in the project-level traffic report.

51-207

The program-level analysis recommends general mitigation strategies such as signal optimization and synchronization, which do not conflict with the studies cited in the comment. The transportation plans and policies of local jurisdictions will be reviewed and included in the project-level traffic analysis, and specific mitigation measures will be recommended based on the results of the project-level analysis. These will be consistent with the South County Circulation Study and the Santa Clara County's Comprehensive County Expressway Planning Study. Updated Association of Bay Area Governments (ABAG) and

Association of Monterey Bay Area Governments (AMBAG) population and employment projections, and travel forecasts based on VTA's updated travel forecast model, may alter the findings and recommendations of these earlier studies that were based on employment forecasts which have been substantially revised.

51-208

The Partially Revised Draft Program EIR addresses those topics identified in the final judgment for the *Atherton 1* and *Atherton 2* litigation as requiring corrective work under CEQA. The potential for floodplain impacts was not one of those topics. Refer to Chapter 3.14, Hydrology and Water Resources, of the 2008 Final Program EIR for a discussion of floodplain impacts at the program level. Detailed hydrology and hydraulics reports for the selected network alternative will be prepared as part of second-tier environmental review.

For further information refer to Standard Response 3 regarding the level of detail provided at the program level.

51-209

Comment acknowledged.

51-210

The Authority will coordinate stormwater and water quality requirements with the State Water Resources Control Board and applicable Regional Water Quality Control Board(s) that have jurisdiction over each second-tier project-level section. Specific requirements and mitigation will be developed through this coordination, and will be discussed in each project-level EIR/EIS. Refer to Chapter 3.14, Hydrology and Water Resources, of the 2008 Final Program EIR for a discussion of hydrology and water quality impacts at the program level. This chapter includes mitigation strategies for addressing surface water quality, runoff, and erosion.

For further information refer to Standard Response 3 regarding the level of detail provided at the program level.

51-520

Comment acknowledged.

51-211

As discussed in Section 3.16.3(F) of the 2008 Final Program EIR, the Coyote Creek Parkway could be directly affected by the Pacheco Alignment Alternative, wherein the potential shifting of Monterey Highway would occur. If a Pacheco Pass Network Alternative is selected by the Board, second-tier, project-level design will be conducted and will identify precise impacts on Section 4(f) resources, biological resources, noise and vibration impacts, and other potential construction-related impacts that may occur. Following an identification of project-level impacts, detailed mitigation measures will be crafted to minimize these impacts where feasible. Additionally, mitigation strategies that will be applied during the project-level design phase will include an evaluation of design options to reduce or eliminate potential impacts on Coyote Creek Parkway and other resources.

51-521

Refer to Response to Comment 51-211 above.

51-212

Refer to Response to Comment 51-211 above for a discussion of the program-level impacts, including those to the Coyote Creek Parkway, identified in the 2008 Final Program EIR. The San Jose to Merced Section team has been and will continue to engage with the County of Santa Clara County Parks and Recreation Department to define project-level mitigation measures and alignment refinements to avoid or minimize impacts on Section 4(f) resources. These project-level impacts, mitigation, and alignment refinements will be included in the San Jose to Merced Section project-level EIR/EIS if a Pacheco Pass Network Alternative is selected by the Board.

51-213

Refer to Response to Comment 51-211 above for a discussion of the program-level impacts, including those to the Coyote Creek Parkway, identified in the 2008 Final Program EIR. The San Jose to Merced Section team has been and will continue to engage with the County of Santa Clara County Parks and Recreation Department to define project-level mitigation measures and alignment refinements to

avoid or minimize impacts on Section 4(f) resources. These project-level impacts, mitigation, and alignment refinements will be included in the San Jose to Merced Section project-level EIR/EIS if a Pacheco Pass Network Alternative is selected by the Board.

51-522

Comment acknowledged. Refer to Standard Response 3 regarding the appropriate level of detail to be provided in the program and project-level tiered documents.

51-214

An evaluation of potential impacts on resources identified within and/or conflicts related to the Santa Clara County's General Plan, including the Parks and Recreation Element, and the Santa Clara County Countywide Trails Master Plan Update will be included in the San Jose to Merced Section project-level EIR/EIS if a Pacheco Pass Network Alternative is selected by the Board.

51-215

An evaluation of potential impacts on resources identified within and/or conflicts related to the Coyote Creek Parkway Integrated Natural Resource Management Plan and Master Plan will be included in the project-level San Jose to Merced Section EIR/EIS if a Pacheco Pass Network Alternative is selected by the Board.

51-216

Refer to Response to Comment 51-211 above for a discussion of the program-level impacts, including those to the Coyote Creek Parkway, identified in the 2008 Final Program EIR. The San Jose to Merced Section team has been and will continue to engage with the County of Santa Clara County Parks and Recreation Department to define project-level mitigation measures and alignment refinements to avoid or minimize impacts on Section 4(f) resources. These project-level impacts, mitigation, and alignment refinements will be included in the San Jose to Merced Section project-level EIR/EIS if a Pacheco Pass Network Alternative is selected by the Board.

51-217

Refer to Response to Comment 51-211 above for a discussion of the program-level impacts identified in the 2008 Final Program EIR. The San Jose to Merced Section team has been and will continue to engage with the County of Santa Clara County Parks and Recreation Department, the Santa Clara Valley Water District, and other relevant stakeholders to define project-level mitigation measures and alignment refinements to avoid or minimize environmental impacts. These project-level impacts, mitigation, and alignment refinements will be included in the San Jose to Merced Section project-level EIR/EIS if a Pacheco Pass Network Alternative is selected by the Board.

Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012)

3934

02-17-12P03-C2 REV0

KIRSTEN KEITH
MAYOR
PETER CHIRKI
MAYOR PRO TEM
ANDREW COHEN
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February 14, 2012

California High Speed Rail Authority
Attn: California High Speed Train
Central Valley to Bay Area High Speed Rail Program EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: City of Menlo Park Comments on the Revised Draft Central Valley to Bay Area High Speed Rail Program EIR/EIS

Members of the Authority:

The City of Menlo Park has continued concerns that the revised EIR doesn't have sufficient information to fully evaluate and reach a conclusion regarding the optimal route into the Bay Area. The Authority should continue to make all efforts to analyze alternate routes and/or methods in order to avoid significant adverse impacts to the Peninsula area from the alignment of the High Speed Train (HST). The City is only interested in a primarily two-track blended system in Menlo Park within the existing Caltrain right-of-way or the system in an underground configuration. The City is not interested in any system, which is on an elevated structure, and not interested in seeing it expand to a four-track system for any phase of the project unless in an underground configuration.

The Authority has indicated in the notice for comments on the EIR that responses are only required for those portions of the DEIR/EIS that it has modified since the prior circulation period. The City disagrees that this requirement fits within CEQA. Rather, the standard is that set in *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112. Under that standard, public comment must be allowed if there is new information or changed circumstances that have arisen since the EIR was last circulated, and that information/circumstances indicates that the project will have new or substantially increased impacts, or "if the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect." There have been several circumstances that justify comments beyond the changes the Authority has explicitly made in the EIR. These include, but are not limited to, new ridership information, updated Business Plan, and the potential issues related to the Union Pacific railroad and their rights to use the tracks.

Building
TEL 650.330.0724
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City Council
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Community Services
TEL 650.330.2260
FAX 650.328.1721
Engineering
TEL 650.330.6740
FAX 650.327.5497
Environmental
TEL 650.330.6763
FAX 650.327.5497
Finance
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FAX 650.327.5391
Housing & Redevelopment
TEL 650.330.6706
FAX 650.327.1759
Library
TEL 650.330.2500
FAX 650.327.7630
Maintenance
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58-134

58-135

58-136

58-137

The City of Menlo Park would continue to be directly affected by the project and several of the alternatives, whether through the Caltrain mainline or the Dumbarton Rail Corridor. Menlo Park has previously expressed its concerns related to the project and new rail activity on either of the two rail lines.

58-138

The City's letter on the 2010 draft EIR for this segment is included as an attachment to this letter and should be considered by the Authority as part of the City's official comments on the current draft program EIR. In addition to the City's previous letter the City reiterates here that the following new and unresolved issues that need to be addressed when determining the most appropriate route:

58-139

1. Traffic Analysis - The partially revised draft Program EIR for the Bay Area to Central Valley segment analyzes traffic impacts resulting from lane closures on adjacent parallel streets in some locations along the San Francisco Peninsula where the current Caltrain right of way would be expanded to accommodate the high speed train project. Based on the traffic analysis in the report, there would be a significant and unavoidable impact due to the closure of one lane along Alma Street, between Oak Grove Avenue and Ravenswood Avenue. The report has identified that "Diverted traffic from Alma Street would likely use El Camino Real and intersection impacts could occur if the shift in traffic caused intersections along El Camino Real to operate at conditions approaching or exceeding capacity."

Laurel Street is also likely to be impacted as a diverter route for traffic approaching/departing Alma from the east. This is not noted in the EIR. It is likely that diverted traffic would divert to other perpendicular and parallel arterials and collectors to Alma, such as Laurel, Oak Grove, Ravenswood, and Middlefield Road. One mitigation measure proposed in the report is converting Alma into a one-way roadway, which would seriously impact the traffic patterns on El Camino as well as Laurel, Oak Grove, Ravenswood, and Middlefield.

58-140

2. Ridership Estimates - The Authority should require that the Program level studies use a new demand model that is developed by an independent group managed by the Legislative Analyst's Office (LAO) or the Independent Peer Review Group before moving forward with the project.

The report issued November 18, 2010 by Will Kempton, Chairman of the California High-Speed Rail Peer Review Group, stated: "The issues identified by the Institute for Transportation Studies at the University of California at Berkeley, the Legislative Analyst's Office and the State Auditor's office have raised sufficient concerns with the demand model so as to call into question the project's fundamental basis for going forward. The group recommends that the Authority work with UC Berkeley, the Legislative Analyst's Office and the State Auditor to complete an analysis of any issues regarding the demand models so that a mutually agreed estimate can be reached along with ranges of uncertainty."

Two members of the five person ridership review panel, Frank Koppelman and Billy Charlton were part of previous review team in July 2006 on the existing Cambridge

Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

58-140 model therefore they cannot be considered unbiased since any substantial criticism would reflect poorly on themselves.

We recommend a new demand model be developed by an independent group managed by the LAO or the Independent Peer Review Group before moving forward with the project.

Ridership is the foundation for rail infrastructure planning which drives key decisions and system costs. It is critically important for determining the appropriate route for the system and the overall revenue associated with the system. What is the revenue potential for the system if a more accepted ridership model is used? This question should be examined within the context of reliable ridership projections. Unfortunately, the planning, engineering, and environmental studies that are currently in progress for the San Francisco to San Jose segment continue to be based on the faulty ridership study conclusions.

Menlo Park fully supports the recommendations of the Independent Peer Review Group. However, there is no evidence to date that the Authority intends to follow their recommendations to update the ridership demand model.

58-141 3. Private funding until after the first segment – The initial construction section has secured \$5.2 Billion in federal and state funding for construction of this segment. However, the remaining portion of the initial operating segment north (\$19.4-26.4 Billion) or south (\$21.4-25.8 Billion) of this construction section would still require state and federal funding, both of which do not have secured funding sources. The Business Plan assumes capital investment after the first initial operating system is in place and generating revenue. Given that the federal government has eliminated future funding in high speed rail, and the state government has not secured future funding for the system either, the likelihood that the remaining segment north or south of the initial constructed section can be built small without private funding.

58-142 4. Blended System - The business plan depicts on Exhibit ES-1-Capital Costs for phased sections, a Phase 1 Blended section and a Full Phase 1 section from San Francisco to Los Angeles/Anaheim. This is in conflict with Congresswoman Eshoo/State Assemblyman Gordon/ State Senator Simitian's Plan. The statement from Congresswoman Eshoo/State Senator Simitian/State Assemblyman Gordon Plan called for a "blended" section on the current Caltrain right of way, without expansion to a 4-track system in the future. This full phased system should be removed from the Business Plan, especially while lacking ridership data that would support a four track system. The "blended" approach meets the goals of the High Speed Rail system, while minimizing the impacts to Menlo Park's downtown area and to the overall character of the downtown. The City is only interested in a blended system primarily with two tracks within the current Caltrain right of way, and not interested in seeing it lead to a blended system with expansion to a 4-track system. We are also firmly opposed to Caltrain transferring any real estate interest to the Authority.

58-143 5. Route Alternatives – The Authority should analyze a broad spectrum of alternatives for connectivity from San Jose to San Francisco to fully understand the impacts. One specific alternative should be the continued analysis of terminating the HST project in

58-143 either San Jose or Union City and connecting to an expanded, local transit network with time-coordinated connections. This analysis should include the possibility of sending some HSTs all the way to San Francisco on shared tracks with Caltrain, so that HST passengers would not have to change trains in San Jose or Union City. These train sets could run at speeds similar to the current trains run by Caltrain. The analysis should also include potential upgrades to the Caltrain line such as additional grade separations, track improvements (including widening to three and four tracks at strategic locations), station improvements, electrification, positive train control, etc. These types of alternatives would significantly reduce the impacts to the Peninsula and reduce project costs by avoiding duplication of train services, while still providing a way to serve High Speed Rail and meeting Proposition 1A's requirement to build a High Speed Rail line between San Francisco and Los Angeles. Congresswoman Eshoo/State Senator Simitian/State Assemblyman Gordon Plan for a "blended" section on the current Caltrain right-of-way achieves the goals of the High Speed Rail system, while minimizing construction costs and reducing the impacts along the Peninsula.

58-144 6. Vertical Alignment –Additional alternatives for construction of the High Speed Rail system underground through the peninsula should be carefully studied and included in the document. This alternative would significantly reduce and/or eliminate many of the impacts associated with the system. The underground option could also be constructed in specific areas of greatest impact such as Menlo Park with narrow right-of-way and impacts to the overall character of the downtown. This alternative would also meet the goals of the High Speed Rail system by providing connectivity to San Francisco in a timely manner. The option of undergrounding both Caltrain and HST should be analyzed. The analysis should consider the positive environmental impacts of having all tracks underground, including effects on noise, vibration, aesthetics, property values, etc. With respect to financial feasibility, the air rights above a completely underground system could be sold to help offset the cost of the system with this alternative. Such uses could include linear parks, pedestrian and bicycle paths, bus rapid transit corridors, multi-unit housing, commercial development, etc. The EIR is lacking because it did not consider alternatives for vertical alignments. The EIR only included a slightly elevated track alignment. This lack of analysis does not provide a good understanding of the various alternatives that could be implemented to minimize the impacts created by the HST. A trench or tunnel alternative would lessen the impacts in the City, similar to the undergrounding alternative described above, but has not been evaluated.

The Supplemental AA removes alternatives from further analysis without providing sufficient detail for their removal from consideration. The City of Menlo Park is deeply concerned with the elimination of the tunneling options. These options clearly reduce impacts on the community and potentially reduce the amount of right-of-way required by HST. The Supplemental AA does not provide any details of the properties affected by each option or how another option may reduce that impact. The Supplemental AA is also silent on how each option will be constructed and whether shoofly tracks would be necessary. The temporary construction impacts can have wide reaching implications. A tunneling option would significantly reduce the impacts to properties or eliminate them entirely. These options should be added back to the Alternatives Analysis and be included in the Project Environmental Impact Report for a full analysis.

Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

- 58-145 | 7. Grade Separation – The different potential routes from the Central Valley to the Bay Area would result in different locations for grade separations, which would likely have different levels of impact. The Program EIR/EIS provided little information regarding grade separations within Menlo Park. More thorough analysis of the potential impacts at each roadway crossing should have been included. Grade separations on the Caltrain mainline will create impacts because of the constrained nature of the development in Menlo Park as well as the presence of a historical structure. One likely alternative for grade separation would include raising the tracks. This particular alternative has another unique issue of creating a "wall effect" within the community and dividing the City.
- 58-146 | 8. Historic Structure – The City of Menlo Park Caltrain station has been listed on the National Register of Historic Places since 1974. The impacts to the existing train station has not been analyzed in the EIR or fully discussed. The EIR should clearly analyze the impacts to this structure along with any other historic structure that may be impacted by the HST system.
- 58-147 | 9. Electrification –The appearance of overhead electric power supply for the trains, including the wires, supporting poles, mast arms and insulations, is a matter of significant concern. Also, the electrification system should be compatible with the proposed Caltrain electrification such that two systems do not need to be constructed and maintained. The EIR needs to analyze the impacts associated with electrification of the system for all vertical and horizontal alignments including visual, tree impacts, etc. If the system becomes completely electrified, the EIR should consider the relative impacts of diesel vs. Hybrid vs. all electric engines for freight trains running on the corridor.
- 58-148 | 10. Noise and vibration mitigation – The revised EIR does not include any additional vibration analysis as requested in the Court's verdict. The impacts of vibration cannot be clearly understood without the required information. The additional noise and vibration caused by the HST needs to be clearly stated and addressed. Any noise and/or vibration impacts need to be mitigated as part of the project. Such measures should be included as integral components of the project. These measures should not create other impacts such as construction of a sound wall that might divide the City and adversely affect the residential character of the community.
- 58-149 | 11. Freight – Menlo Park is concerned about freight traffic using either the Caltrain mainline or the Dumbarton Rail line and its impact on residents and traffic in the area. Since the rail lines will be grade separated, which allows for faster trains times and reduced vehicular and pedestrian conflicts, the lines would be more easily suited for freight traffic. This may lead to increased freight traffic on rail lines that currently have minimal freight traffic. The potential increase in freight is not only related to Caltrain's discussions with freight, but a function of the HST project due to amenities proposed as part of the HST project. A new San Francisco Bay crossing along the Dumbarton alignment may open this corridor up to freight traffic, which could substantially increase noise and vibration impacts to adjacent residential neighborhoods in Menlo Park. These potential impacts should have been studied so that mitigation measures could be developed.

- 58-150 | 12. Funding – The project intends to use State General Obligation bonds to fund the project. This funding method would create a long-term financial obligation that could impact existing State programs. The current information related to cost/benefit and fiscal impact analysis needs to be revised to provide a very accurate picture of the project. The current Business Plan for the project outlines several funding sources including federal grants and private investment. The federal funds have not been secured and a funding source for the private investment has not been identified. The private investment indicates that a guaranteed ridership would need to be included. This is contradictory to the Proposition 1A language that does not allow a public subsidy of the operation for the project.

The construction costs have escalated from the initial estimate of \$30 billion to almost \$100 billion. The Authority has planned to partially fund segments of the HST system, while not funding the entire system. This funding arrangement does not fit within the requirement of Proposition 1A. A full funding plan with identified dedicated funding needs to be included in the EIR.
- 58-151 | 13. Property Impacts – The EIR only analyzes the impacts to properties within 50 feet of the HST corridor. The impact due to the HST system such as noise, vibration, and aesthetics will have a much wider reach and affect on properties further from the system. The EIR should clearly analyze the impacts to properties much further from the HST system. A minimum distance of 500' should be used in the analysis. But, the specific distance should be based on the increased impacts and how far they may reach and could vary based on terrain and the specifics of the area.
- 58-152 | 14. Caltrain Service Levels – The EIR assumes two tracks for the HST that would be shared with Caltrain express service and two tracks for Caltrain local service and freight. A recent study on another section of the HST project indicated that the HST tracks could not be shared by another train service. If this is ultimately determined to be true for the Peninsula corridor, Caltrain service would be directly affected and its level of service would be diminished. The current number of tracks for the Peninsula has not been clearly analyzed including the level of service for Caltrain. A study that clearly identifies the required number of tracks for each system and whether the HST system can share tracks with Caltrain, given safety consideration and other factors, needs to be included in the report.

The CAHSRA is considering a Phase 1 "blended" section along the Peninsula. The "blended" system approach would provide shared use of the Caltrain tracks with the HST system. However, Caltrain's blended system recommendations are missing in the business plan. The business plan does not include any of the recommendations from the capacity analysis study that Caltrain's staff conducted for operating the high speed rail's trains and Caltrain's trains on the same tracks and they must be included.
- 58-153 | 15. Construction Impacts – The construction of the project would create many impacts within the City of Menlo Park. The construction of shooftly tracks, traffic diversion, construction noise, etc. should all be analyzed and included in the EIR. The construction impacts and duration should be considered as part of the selection of the alternatives,

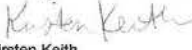
Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

- 58-153 since the construction will be of much longer duration than typical construction projects. These are not temporary impacts, but impacts that will affect residents and business for an extended period. The impact of the shoofly tracks on adjacent properties needs to be clearly analyzed and stated in the document including any mitigation measures. The shoofly tracks will likely affect traffic patterns, create additional noise for many residents and require acquisition of property. The affect of the construction on businesses needs to be clearly analyzed, both physical and financial. Many businesses cannot remain closed for extended periods and be viable. The affect on the businesses could create an economic impact on the City that needs to be clearly addressed in the EIR.
- 58-154 16. Eminent Domain – The project will require additional right-of-way for the various construction options as described in the more recent Alternatives Analysis. The Alternatives Analysis clearly indicates that the right-of-way requirements in Menlo Park for most of the alternatives that would reduce impacts will be greater than the available right-of-way. The acquisition of additional right-of-way by the Authority would likely require eminent domain in many cases. A clear analysis of the properties that will be affected by the need for additional right-of-way needs to be included in the EIR. Also, the EIR needs to include mitigation measures to eliminate the need for additional right-of-way or ways to preserve the full use of the properties and eliminating other environment impacts. These impacts are essential at the Program Level EIR stage to make an informed decision on the appropriate route for the system.
- 58-155 17. Union Pacific Trackage Rights – The Union Pacific Railroad currently has the contractual rights to intercity rail along the Caltrain corridor. An agreement with Union Pacific has not been reached for High Speed Rail to utilize the tracks for intercity rail. This information should be clearly analyzed and considered in the EIR for a determination on the route choice for this segment of HST.
- 58-156 18. Grade Separation Costs – The EIR is unclear as to how the costs for the grade separations along the system were estimated. The cost estimates should not only include crossings that are being converted from at-grade to grade separated (new grade separations), but also modifications to current grade separations and what costs and modifications are required. The total financial picture for the HST project is essential in effectively evaluating routing alternatives in the EIR.
- 58-157 19. Existing Crossings – The current pedestrian, bicycle and vehicular crossing of the current Caltrain tracks are essential for the movement of people and goods. The Authority needs to commit to maintaining all of the current crossings completely open with no closures. At a minimum, the crossings need to continue to operate with the same level and types of traffic as they do today. Beyond the current crossings, the Authority should resolve to increase connectivity across the railroad tracks with better crossings, and more pedestrian and bicycle crossings.
- 58-158 20. Other Environmental Impacts – The HST project will require the removal of trees, affect view corridors and grade separation will significantly impact local traffic circulation. The HST would also change the quiet residential neighborhood character of Menlo Park by introducing a train system that would not fit within the community. These issues need to be clearly understood prior to making a final decision on the best alignment for the

58-158 project. The current program level EIR/EIS is not sufficiently detailed to allow those affected to understand the potential impacts before a final route is selected.

58-159 Finally, the City of Menlo Park would reiterate the concerns raised above and the fact that further information is necessary in order to make an informed decision on the appropriate route for HST to the Bay Area. While we understand that the nature of a "program" environmental document on a statewide project is inherently general, we wish to bring to your attention specific concerns of the City of Menlo Park that are still not adequately addressed in the revised Draft EIR. The Authority has made it clear that it is unwilling to consider alternative routes in its project level EIR for the Peninsula Segment. Therefore, it is incumbent on the Authority to complete a more comprehensive analysis of the impacts with the Program EIR.

The City expects to have these items addressed as part of the revised Final High Speed Rail Program EIR/EIS. The City looks forward to the Attorney General's decision regarding the blended system. The City will continue to participate in the EIR/EIS process to review any impacts and proposed mitigation measures within Menlo Park.

Sincerely,

 Kirsten Keith
 Mayor

Attachment: City of Menlo Park comment letter on the Central Valley to Bay Area High Speed Rail Program EIR/EIS dated April 22, 2010

Cc: Members of the City Council
 City Attorney
 Public Works Director
 Dan Richard, High Speed Rail Authority Board Chairperson
 Lynn Schenk, High Speed Rail Authority Board
 Thomas Richards High Speed Rail Authority Board
 Russ Burns High Speed Rail Authority Board
 Robert Balgenorth High Speed Rail Authority Board
 Jim Hartnett High Speed Rail Authority Board
 Michael Rossi High Speed Rail Authority Board
 Assistant City Manager
 Congresswoman Anna Eshoo
 Assemblymember Rich Gordon
 State Senator Joe Similtian

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012)

RICHARD CLINE
MAYOR
JOHN BOYLE
VICE MAYOR
ANDREW COHEN
COUNCIL MEMBER
HEYWARD ROBINSON
COUNCIL MEMBER
KILLY FERGUSSON
COUNCIL MEMBER



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April 22, 2010

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California High Speed Rail Authority
Attn: California High Speed Train
Central Valley to Bay Area High Speed Rail Program EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: City of Menlo Park Comments on the Revised Draft Central Valley to Bay Area High Speed Rail Program EIR/EIS

Members of the Authority:

The City of Menlo Park has continued concerns that the revised EIR doesn't have sufficient information to fully evaluate and reach a conclusion regarding the optimal route into the Bay Area. The Authority should continue to make all efforts to analyze alternate routes and/or methods in order to avoid significant adverse impacts to the Peninsula area from the alignment of the High Speed Train (HST).

The Authority has indicated in the notice for comments on the EIR that responses are only required for those portions of the DEIR/EIS that it has modified since the prior circulation period. The City disagrees that this requirement fits within CEQA. Rather, the standard is that set in *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112. Under that standard, public comment must be allowed if there is new information or changed circumstances that have arisen since the EIR was last circulated, and that information/circumstances indicates that the project will have new or substantially increased impacts, or "if the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect." There have been several circumstances that justify comments beyond the changes the Authority has explicitly made in the EIR. These include, but are not limited to, new ridership information, updated Business Plan, and the potential issues related to the Union Pacific railroad and their rights to use the tracks.

The City of Menlo Park would continue to be directly affected by the project and several of the alternatives, whether through the Caltrain mainline or the Dumbarton Rail Corridor. Menlo Park has previously expressed its concerns related to the project and new rail activity on either of the two rail lines. The City's letter on the 2007 draft EIR for this segment is included as an attachment to this letter and should be considered by the Authority as part of the City's official comments on the current draft program EIR. In addition to the City's previous letter the City reiterates here that the following new and unresolved issues that need to be addressed when determining the most appropriate route:

1. Ridership Estimates – The Authority should ensure that the Program level studies use accurate, publicly available, peer reviewed models, coefficients, datasets, etc. in all ridership simulations and analyses. The effect of recent questionable coefficients within the business plan related to the ridership model should be clearly explained. Menlo Park asserts that the data used to drive the route and preferred alternate decisions was based upon older ridership data which may or may not have altered the outcome and thereby influenced one route over another. The EIR should explain in clear detail the data used to determine the routes and alternatives and how the recent ridership numbers impact the routes analyzed in the EIR.
2. Financial analysis and Business Plan - The Authority should ensure that the Program level studies use accurate, publicly available, peer-reviewed models, coefficients, datasets, etc. in its Business Plan and financial analyses.
3. Route Alternatives – The Authority should analyze a broad spectrum of alternatives for connectivity from San Jose to San Francisco to fully understand the impacts. One specific alternative should be the continued analysis of terminating the HST project in either San Jose or Union City and connecting to an expanded, local transit network with time-coordinated connections. This analysis should include the possibility of sending some HSTs all the way to San Francisco on shared tracks with Caltrain, so that HST passengers would not have to change trains in San Jose or Union City. These train sets could run at speeds similar to the current Caltrain trains. The analysis should also include potential upgrades to the Caltrain line such as additional grade separations, track improvements (including widening to three and four tracks at strategic locations), station improvements, electrification, positive train control, etc. These types of alternatives would significantly reduce the impacts to the Peninsula and reduce project costs by avoiding duplication of

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

train services, while still providing a way to serve High Speed Rail and meeting the Proposition 1A's requirement to build a High Speed Rail line between San Francisco and Los Angeles.

4. Vertical Alignment –Additional alternatives for construction of the HST underground through the Peninsula should be carefully studied and included in the document. This alternative would significantly reduce and/or eliminate many of the impacts associated with the system. The underground alternative could also be constructed in specific areas of greatest impact such as Menlo Park with narrow right-of-way and impacts to the overall character of the downtown. This alternative would also meet the goals of the HST by providing connectivity to San Francisco in a timely manner. The option of undergrounding both Caltrain and HST should be analyzed. The analysis should consider the positive environmental impacts of having all tracks underground, including effects on noise, vibration, aesthetics, property values, etc. With respect to financial feasibility, the air rights above a completely underground system could be sold to help offset the cost of the system with this alternative. Such uses could include linear parks, pedestrian and bicycle paths, bus rapid transit corridors, multi-unit housing, commercial development, etc.

The EIR is lacking because it did not consider alternatives for vertical alignments. The EIR only included a slightly elevated track alignment. This lack of analysis does not provide a good understanding of the various alternatives that could be implemented to minimize the impacts created by the HST. A trench or tunnel alternative would lessen the impacts in the City, similar to the undergrounding alternative described in item # 1 above, but has not been evaluated.

5. Grade Separation – The different potential routes from the Central Valley to the Bay Area would result in different locations for grade separations, which would likely have different levels of impact. The Program EIR/EIS provided little information regarding grade separations within Menlo Park and along the Peninsula. The EIR must analyze the need for new grade separations as it does, but also analyze the potential reconstruction or modification of current grade separations in Menlo Park and along the entire Peninsula that may not be suitable for HST. More thorough analysis of the potential impacts at each roadway crossing should have been included. Grade separations on the Caltrain mainline will create impacts because of the constrained nature of the development in Menlo Park as well as the presence of a historical structure. One likely alternative for grade separation would include raising the tracks.

This particular alternative has another unique issue of creating a "wall effect" within the community and dividing the City.

Grade separations are not identified in the EIR. The EIR should indicate which crossings are expected to be separated, and define whether each intersection is to be separated by underpasses or overpasses (presumably the vehicular and pedestrian traffic and not HST). Grade separations cause substantially more construction, surface disturbance, noise, air quality, aesthetics, and transportation conflicts. An elevated railway would be a significant change from the existing landscape, and could have significant impacts on neighboring communities. Project construction could have significant impacts, such as disruption of existing rail service and disruption of local business; these issues are not addressed in the EIR. These impacts must be analyzed for the CEQA document to be adequate.

6. Historic Structure – The City of Menlo Park Caltrain station has been listed on the National Register of Historic Places since 1974. The impacts to the existing train station has not been analyzed in the EIR or fully discussed. The EIR should clearly analyze the impacts to this structure along with any other historic structure that may be impacted by the HST system.
7. Electrification –The appearance of overhead electric power supply for the trains, including the wires, supporting poles, mast arms and insulations, is a matter of significant concern. Also, the electrification system should be compatible with the proposed Caltrain electrification such that two systems do not need to be constructed and maintained. The EIR needs to analyze the impacts associated with electrification of the system for all vertical and horizontal alignments including visual, tree impacts, etc. If the system becomes completely electrified, the EIR should consider the relative impacts of diesel VS. hybrid VS. all electric engines for freight trains running on the corridor.
8. Noise and vibration mitigation – The revised EIR does not include any additional vibration analysis as requested in the Court's verdict. The impacts of vibration cannot be clearly understood without the required information. The additional noise and vibration caused by the HST needs to be clearly stated and addressed. Any noise and/or vibration impacts need to be mitigated as part of the project. Such measures should be included as integral components of the project. These measures should not create other impacts such as construction of a sound wall that might divide the City and adversely affect the residential character of the community.

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

- 9. Freight – Menlo Park is concerned about freight traffic using either the Caltrain mainline or the Dumbarton Rail line and its impact on residents and traffic in the area. Since the rail lines will be grade separated, which allows for faster train times and reduced vehicular and pedestrian conflicts, the lines would be more easily suited for freight traffic. This may lead to increased freight traffic on rail lines that currently have minimal freight traffic. The potential increase in freight is not only related to Caltrain's discussions with freight, but a function of the HST project due to amenities proposed as part of the HST project. A new San Francisco Bay crossing along the Dumbarton alignment may open this corridor up to freight traffic, which could substantially increase noise and vibration impacts to adjacent residential neighborhoods in Menlo Park. These potential impacts should have been studied so that mitigation measures could be developed.
- 10. Funding – The project intends to use State General Obligation bonds to fund the project. This funding method would create a long-term financial obligation that could impact existing State programs. The current information related to cost/benefit and fiscal impact analysis needs to be revised to provide a very accurate picture of the project. The current Business Plan for the project outlines several funding sources including federal grants and private investment. The federal funds have not been secured and a funding source for the private investment has not been identified. The private investment indicates that a guaranteed ridership would need to be included. This is contradictory to the Proposition 1A language that does not allow a public subsidy of the operation for the project. The Program EIR indicated that an annual ridership number of 88 million passengers was included for cost/benefit purposes. The current Business Plan indicates that the initial phase of the HST system would include 41 million passengers. Both of these estimates appear to be for the Bay Area segment. The apparent reduction in ridership indicated in the Business Plan should be utilized for the Program Level EIR to better understand the funding requirements of the project. The Authority has planned to partially fund segments of the HST system, while not funding the entire system. This funding arrangement does not fit within the requirement of Proposition 1A. A full funding plan with identified dedicated funding needs to be included in the EIR.
- 11. Property Impacts – The EIR only analyzes the impacts to properties within 50 feet of the HST corridor. The impact due to the HST system such as noise, vibration, and aesthetics will

have a much wider reach and affect on properties further from the system. The EIR should clearly analyze the impacts to properties much further from the HST system. A minimum distance of 500' should be used in the analysis. But, the specific distance should be based on the increased impacts and how far they may reach and could vary based on terrain and the specifics of the area.

- 12. Caltrain Service Levels – The EIR assumes two tracks for the HST that would be shared with Caltrain express service and two tracks for Caltrain local service and freight. A recent study on another section of the HST project indicated that the HST tracks could not be shared by another train service. If this is ultimately determined to be true for the Peninsula corridor, Caltrain service would be directly affected and its level of service would be diminished. The current number of tracks for the Peninsula has not been clearly analyzed including the level of service for Caltrain. A study that clearly identifies the required number of tracks for each system and whether the HST system can share tracks with Caltrain, given safety consideration and other factors, needs to be included in the report.
- 13. Construction Impacts – The construction of the project would create many impacts within the City of Menlo Park. The construction of a shoofly tracks, traffic diversion, construction noise, etc. should all be analyzed and included in the EIR. The construction impacts and duration should be considered as part of the selection of the alternatives, since the construction will be of much longer duration than typical construction projects. These are not temporary impacts, but impacts that will affect residents and business for an extended period. The impact of the shoofly tracks on adjacent properties needs to be clearly analyzed and stated in the document including any mitigation measures. The shoofly tracks will likely affect traffic patterns, create additional noise for many residents and require acquisition of property. The affect of the construction on businesses needs to be clearly analyzed, both physical and financial. Many businesses cannot remain closed for extended periods and be viable. The affect on the businesses could create an economic impact on the City that needs to be clearly addressed in the EIR.
- 14. Eminent Domain – The project will require additional right-of-way for the various construction options as described in the more recent Alternatives Analysis. The Alternatives Analysis clearly indicates that the right-of-way requirements in Menlo Park for most of the alternatives that would reduce impacts will be greater than the available right-of-way. The acquisition of additional right-

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

of-way by the Authority would likely require eminent domain in many cases. A clear analysis of the properties that will be affected by the need for additional right-of-way needs to be included in the EIR. Also, the EIR needs to include mitigation measures to eliminate the need for additional right-of-way or ways to preserve the full use of the properties and eliminating other environment impacts. These impacts are essential at the Program Level EIR stage to make an informed decision on the appropriate route for the system.

15. Union Pacific Trackage Rights – The Union Pacific Railroad currently has the contractual rights to intercity rail along the Caltrain corridor. An agreement with Union Pacific has not been reached for High Speed Rail to utilize the tracks for intercity rail. This information should be clearly analyzed and considered in the EIR for a determination on the route choice for this segment of HST.

16. Grade Separation Costs – The EIR is unclear as to how the costs for the grade separations along the system were estimated. The cost estimates should not only include crossings that are being converted from at-grade to grade separated (new grade separations), but also modifications to current grade separations and what costs and modifications are required. The total financial picture for the HST project is essential in effectively evaluating routing alternatives in the EIR.

17. Existing Crossings – The current pedestrian, bicycle and vehicular crossing of the current Caltrain tracks are essential for the movement of people and goods. The Authority needs to commit to maintaining all of the current crossings completely open with no closures. At a minimum, the crossings need to continue to operate with the same level and types of traffic as they do today. Beyond the current crossings, the Authority should resolve to increase connectivity across the railroad tracks with better crossings, and more pedestrian and bicycle crossings.

18. Additional Facilities – The project description is essentially limited to the alignment of the track corridors and possible stations, but does not mention the additional support facilities, other than the maintenance facility, that would be needed. These additional support facilities would include layover facilities, turnouts, bridges, and tunnels, advanced signaling and communications systems, electrification facilities, station automobile parking structures, and the public open spaces needed to support the pedestrian traffic generated by the hub

stations. The EIR is inadequate because they are not identified or analyzed in the document. If the potential environmental impacts of these supporting facilities are not going to be addressed in the EIR, they should be identified, the typical effects explained, and should be addressed in detail in the forthcoming project-level engineering and environmental reviews.

19. Other Environmental Impacts – The HST project will require the removal of trees, affect view corridors and grade separation will significantly impact local traffic circulation. The HST would also change the quiet residential neighborhood character of Menlo Park by introducing a train system that would not fit within the community. These issues need to be clearly understood prior to making a final decision on the best alignment for the project. The current program level EIR/EIS is not sufficiently detailed to allow those affected to understand the potential impacts before a final route is selected.

Finally, the City of Menlo Park would reiterate the concerns raised above and the fact that further information is necessary in order to make an informed decision on the appropriate route for HST to the Bay Area. While we understand that the nature of a "program" environmental document on a statewide project is inherently general, we wish to bring to your attention specific concerns of the City of Menlo Park that are not adequately addressed in the revised Draft EIR. The Authority has made it clear that it is unwilling to consider alternative routes in its project level EIR for the Peninsula Segment. Therefore, it is incumbent on the Authority to complete a more comprehensive analysis of the impacts with the Program EIR.

The City expects to have these items addressed as part of the revised Final High Speed Rail Program EIR/EIS. The City will continue to participating in the EIR/EIS process to review any impacts and proposed mitigation measures within Menlo Park.

Sincerely,



Richard Cline
Mayor

Attachment: City of Menlo Park comment letter on the Central Valley to Bay Area High Speed Rail Program EIR/EIS dated September 25, 2007

Cc: Members of the City Council
Curt Pringle, High Speed Rail Authority Board Chairperson

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

Tom Umberg, High Speed Rail Authority Board Vice-Chairperson
Quentin Kopp, High Speed Rail Authority Board Member
Fran Florez, High Speed Rail Authority Board Member
David Crane, High Speed Rail Authority Board Member
Rod Diridon, High Speed Rail Authority Board Member
Lynn Schenk, High Speed Rail Authority Board Member
Russ Burns, High Speed Rail Authority Board Member
Richard Katz, High Speed Rail Authority Board Member
City Attorney
Deputy City Manager

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September 25, 2007

California High Speed Rail Authority
Attn: California High Speed Train
Central Valley to Bay Area High Speed Rail Program EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: City of Menlo Park Comments on the Central Valley to Bay Area High Speed Rail Program EIR/EIS

Members of the Authority:

Thank you for the opportunity to review and comment on the EIR/EIS for the Central Valley to Bay Area segment of the High Speed Train (HST) system.

The City of Menlo Park appreciates the Authority's efforts to analyze alternate routes and/or methods in order to avoid significant adverse impacts to the Peninsula area from the alignment of the HST.

The City of Menlo Park would, however, be directly affected by several of the alternatives, whether through the Caltrain mainline or the Dumbarton Rail Corridor. Menlo Park previously has expressed its concerns related to new rail activity on either of the two rail lines and reiterates here that the following issues need to be addressed when determining the most appropriate route:

- 1. Alternatives – The Authority should continue to further analyze terminating the HST project in either San Jose or Union City and connecting to existing systems with time-coordinated connections, etc. Also, two additional alternatives should be carefully studied and included in the document. First, a route generally along the I-280 corridor from San Jose to San Francisco should be included. This route would have reduced impacts to many of the communities on the peninsula and should be carefully addressed. Second, construct the system underground through the peninsula. This would significantly reduce many of the impacts associated with the system. Also, the air rights above the system could be leased to offset the cost of the system with this alternative.

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

2. Grade Separation -- The Program EIR/EIS provided little information regarding grade separations within Menlo Park. Grade separations on the Caltrain mainline will create impacts because of the constrained nature of the development in Menlo Park as well as the presence of a historical structure. One likely alternative for grade separation would include raising the tracks. This particular alternative has another unique issue of creating a "wall effect" within the community and dividing the City. A trench alternative would lessen the impacts in the City, similar to the undergrounding alternative described in item # 1 above. The City would also expect that any project level EIR/EIS's would address and mitigate all the impacts of grade separation including, but not limited to, the economic impacts.

3. Electrification --The appearance of overhead electric power supply for the trains, including the wires, supporting poles, mast arms and insulations, is a matter of significant concern. Also, the electrification system should also be compatible with the proposed Caltrain electrification such that two systems do not need to be constructed and maintained.

4. Noise and vibration mitigation -- The additional noise and vibration caused by the HST needs to be clearly stated and addressed. Any noise and/or vibration impacts need to be mitigated as part of the project. Such measures should be included as integral components of the project. These measures should not create other impacts such as construction of a sound wall that might divide the City and affect the neighborhood feel of the community.

5. Freight -- Menlo Park is concerned about freight traffic using either the Caltrain mainline or the Dumbarton Rail line and its impact on residents and traffic in the area. Since the rail lines will be grade separated, which allows for faster trains times and reduced vehicular and pedestrian conflicts, the lines would be more easily suited for freight traffic. This may lead to increased freight traffic on rail lines that currently have minimal freight traffic. A new San Francisco Bay crossing along the Dumbarton alignment may open this corridor up to freight traffic, which could substantially increase impacts to adjacent residential neighborhoods in Menlo Park.

6. Funding -- The project intends to use State General Obligation bonds to fund the project. This funding method would create a long-term financial obligation that could impact existing State programs. A detailed

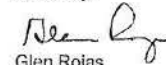
cost/benefit and fiscal impact analysis should be provided for the project, so voters can make an informed decision. Also, additional funding sources should be sought to share the costs of the project.

7. Other Environmental Impacts -- The HST project will require the removal of trees, affect view corridors and grade separation will significantly impact local traffic circulation. The HST would also change the close neighborhood character of Menlo Park by introducing a train system that would not fit within the community. These issues need to be clearly understood prior to making a final decision on the best alignment for the project. The current program level EIR/EIS is not sufficiently detailed to allow those affected to understand the potential impacts before they are asked to vote on funding for the project. A project specific EIR/EIS should be completed for work on the San Francisco peninsula before the HST project appears on the ballot due to the higher level of likely environmental impacts as compared with other parts of the HST project.

Attached to this letter are Menlo Park's previous comment letters for other rail projects on the same rail corridors. The issues related to HST are very similar to the issues raised in those comment letters. The City of Menlo Park would expect the Authority to consider all of these comments when evaluating the City's responses to the draft EIR/EIS.

Finally, the City of Menlo Park appreciates the opportunity to provide input on the High Speed Rail Program EIR/EIS. The City looks forward to participating in the EIR/EIS process to review any impacts and proposed mitigation measures within Menlo Park. As previously noted, the City of Menlo Park cannot declare itself in support of the project until the issues described above have been carefully evaluated and addressed through the evaluation and design process.

Sincerely,



Glen Rojas
City Manager

Cc: Members of the City Council
Quentin Kopp, High Speed Rail Authority Board Chairperson
Fran Florez, High Speed Rail Authority Board Vice-Chairperson
Donna Andrews, High Speed Rail Authority Board Member

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued



701 LAUREL STREET, MENLO PARK, CA 94025-3483
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ATTACHMENT A



- LEE S. DUROO
MAYOR
- MICHE WINKLER
MAYOR PRO TEM
- PAUL J. COFFACCHI
COUNCIL MEMBER
- NICHOLAS P. BELFANT
COUNCIL MEMBER
- CHARLES MANNING
COUNCIL MEMBER

David Crane, High Speed Rail Authority Board Member
Rod Diridon, High Speed Rail Authority Board Member
Kirk Lindsey, High Speed Rail Authority Board Member
Curt Pringle, High Speed Rail Authority Board Member
Lynn Schenk, High Speed Rail Authority Board Member
Tom Stapleton, High Speed Rail Authority Board Member
City Attorney
Director of Public Works

August 26, 2004

California High-Speed Rail Authority
Attn: California High-Speed Train
Draft Program EIR/EIS Comments
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: **City of Menlo Park Comments on Draft Program EIR/EIS**

Members of the Authority:

Thank you for the opportunity to review and comment on the Draft Program EIR/EIS for the proposed statewide high-speed rail project.

While we understand that the nature of a "program" environmental document on a statewide project is inherently general, we wish to bring to your attention specific concerns of the City of Menlo Park that are not adequately addressed in the Draft Program EIR/EIS and that must have "project level" environmental review before the overall program can proceed.

The Draft Program EIR/EIS information on the Menlo Park grade separation issue is limited to a map of northern California extending from the Carquinez Strait to Gilroy entitled *Figure 2.7-5, HST Alignment Options-Profile Characteristics, Bay Area To Merced Region*. This Figure has a single colored line passing through Menlo Park bearing the legend "Slightly Elevated or Depressed". This level of information is inadequate as a description of the grade separation work the Authority intends to undertake. Furthermore, grade separation and expanding the line to four tracks as proposed would necessitate relocation of a historic structure within the Menlo Park rail station complex. The document does not provide adequate information on what right-of-way may have to be acquired in Menlo Park permanently or for temporary construction easements to develop four tracks in the Caltrain alignment and construct the grade separations. Until the HST project defines an explicit horizontal and vertical alignment proposal for tracks and roadways, the City and the affected public in Menlo Park cannot reasonably know what the real impacts of the project are.

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Attachments:

- A. City of Menlo Park comments and resolution on the first California High Speed Rail Program EIR/EIS dated August 26, 2004.
- B. City of Menlo Park comments on the Caltrain Electrification EIR/EIS dated May 24, 2004.
- C. City of Menlo Park comments on the Dumbarton Rail Corridor Project dated July 23, 2007.
- D. City of Menlo Park comments on the San Francisco Bay Area Regional Rail Plan dated August 29, 2007.

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

The document needs to include additional information on impacts and mitigation measures in relation to noise resulting from High Speed rail operation in the areas of Menlo Park with residential housing near the rail corridor. Other issues of concern to the City of Menlo Park are loss of trees, impact to view corridors, economic impacts to nearby property owners and local traffic circulation. These issues need to be discussed in more detail in the document.

The appearance of overhead electric power supply for the trains, including the wires, supporting poles, mast arms and insulators, is a matter of significant concern for Menlo Park. Any new electrical substations in Menlo Park would also be of concern. The Draft Program EIR/EIS provides insufficient information for the public to determine whether these aspects of the project would be detrimental to Menlo Park. The electrification system proposed for the HST is similar to that proposed for the Caltrain system by the Peninsula Corridor Joint Powers Board (the JPB). On May 25, 2004 Menlo Park filed formal comments on the JPB's Draft EIR for Caltrain Electrification. Menlo Park attaches its letter of comment on the proposed Caltrain Electrification to this letter, and identifies those comments as applicable to the HST Program EIR/EIS.

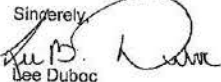
Although the document indicates the Authority will conduct a project level EIR to the extent needed to assess potential Environmental Impacts not already addressed in this Program EIR/EIS, the fact that the project is being taken to the voters of the state for funding approval on the basis of the Program EIR/EIS document tends to deprive the public of full disclosure of the program's environmental impacts at the time they make their decision on whether to vote funding for the project. The opinions of voters in communities like Menlo Park, that are to be traversed by, and likely to be significantly impacted by the high speed rail project, would be more heavily influenced by the details of local impacts of grade separations, right-of-way acquisition and electrification that are not adequately addressed in the Program EIR/EIS than by the information on statewide travel needs and impacts that the Program EIR/EIS focuses on.

Menlo Park is compelled to comment that while economic issues are not normally addressed in the EIR funding the High-Speed Rail Project with general obligation bonds to be paid from the State General Fund seems inappropriate and irresponsible at a time when the general fund is in a deficit condition and state funding to schools and local government is being squeezed to offset the general fund deficit. At a minimum, Menlo Park urges that any bond obligations on the State General Fund be deferred for several years, and that preferably the project be funded through revenue bonds or with a new direct taxation funding source, not through draw-downs on existing state and local fund resources.

Finally, the City of Menlo Park does not concur in the decision to exclude the Altamont Corridor rail route from further consideration and evaluation in the HST

EIR/EIS. It is premature to arbitrarily eliminate an alternative at such an early stage.

The City of Menlo Park does not wish to be in opposition to the Statewide High-Speed Rail Project. However, until the potentially critical local impacts described above are carefully worked out through the design process and evaluated in a project-level EIR/EIS, and until a financing plan that does not compound the difficulties facing local government is developed, Menlo Park cannot declare itself in support of the Project (please see attached Resolution).

Sincerely,

Lee Duboc
Mayor

Attachment: Resolution # _____
Letter of comments on Caltrain Electrification Program

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MENLO PARK COMMENTING ON THE CALIFORNIA HIGH SPEED RAIL SYSTEM DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

WHEREAS, the California High Speed Rail Authority was established by the Legislature in 1996 for implementing a statewide high speed train system for California; and,

WHEREAS, it is the intent of the State Legislature and the High Speed Rail Authority that a statewide ballot measure to authorize bonds that would fund the project through design and the first stages of construction go to the voters in November of 2006; and,

WHEREAS, the California High Speed Rail Authority has circulated a Draft Program Environmental Impact Report/Environmental Impact Statement on the proposed California High Speed Rail Project seeking comments; and,

WHEREAS, as proposed, the high speed rail line would pass through Menlo Park in the Caltrain corridor, the project would expand the Caltrain line to four tracks, electrify the line, grade separate all crossings, would generate 86 trips a day by the year 2020, and the Authority would perform more specific environmental impact analysis for segments of the rail line and the stations should the high speed train advance to subsequent phases of project development.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Menlo Park that:

- 1. The fact that the project is being taken to the voters of the state for funding approval on the basis of the Program EIR/EIS document tends to deprive the public of full disclosure of the program's environmental impacts. The opinions of voters in communities like Menlo Park, that are to be traversed by and likely to be significantly impacted by the high speed rail project, would be more heavily influenced by the details of local impacts of the project that are not adequately addressed in the Program EIR/EIS than by the information on statewide travel needs and impacts that the Program EIR/EIS focuses on.
2. The project sponsor needs to identify issues of critical concern to Menlo Park at this stage of the project development in order to assure that these issues will be addressed in some depth in subsequent project-level environmental documentation.
3. Funding a \$37 billion project with state general obligation funds seems inappropriate at a time when the State General Fund is in a shortfall condition that is already adversely impacting local governments.
4. The Program EIR/EIS is so general it does not provide adequate information regarding the impacts on right-of-way, noise, historic buildings, trees, businesses, aesthetics and local traffic circulation.
5. Menlo Park would experience staff cost in coordinating the planning, design and construction activities of the high speed train project.
6. Menlo Park does not concur in the decision to exclude further evaluation of the Altamont Corridor rail route, and requests the Authority to revive consideration of that route at this stage of environmental review process.
7. Menlo Park expresses its strong desire for exploring alternate routes and/or methods to avoid the Peninsula area as the alignment for the high speed rail line, i.e. by integrating it with existing systems.

I, SILVIA VONDERLINDEN, City Clerk of the City of Menlo Park, do hereby certify that the above and foregoing Resolution was duly and regularly passed and adopted at a meeting by said Council on _____, 2004, by the following vote:

AYES: Council members:
NOES: Council members:
ABSENT: Council members:
ABSTAIN: Councilmembers:



701 LAUREL STREET, MENLO PARK, CA 94025-3483
www.menlopark.org

May 24, 2004

Caltrain Electrification
1250 San Carlos Avenue
San Carlos, CA 94070

Subject: Caltrain Electrification Program, Environmental Assessment / Draft Environmental Impact Report

Members of the Peninsula Corridor Joint Powers Board:

Thank you for the opportunity to comment on the Environmental Assessment / Draft Environmental Impact Report on the proposed Caltrain Electrification Program. Menlo Park recognizes that it benefits substantially from Caltrain services and wishes to cooperate with the JPB in improving the quality and efficiency of Caltrain services and operations. However, it must also be recognized that the central portion of Menlo Park is adversely impacted by some of the characteristics of Caltrain operations. As a result, any significant change in Caltrain operations is a matter of considerable public concern. This letter is intended to convey those concerns on behalf of Menlo Park's most directly affected citizens.

After carefully considering the draft document, we believe that there are a number of considerations that must be addressed in more depth before the document would be reasonably adequate for certification.

Our concerns include the following points:

- The project's impact on trees in and near Menlo Park is not sufficiently clear. We understand that there is a detailed arborist's report, but that report has not been directly incorporated in the document. If the content of the arborist's report concerning tree loss in and near Menlo Park is as has been reported in the press (eight to twelve trees at the San Francisquito Creek crossing, fifteen to twenty-two of the fifty-six trees along the tracks in Menlo Park and twenty-five percent of the trees along the tracks in nearby Atherton slated for removal), the DEIR's conclusion of "no permanent impacts" to biological resources may be incorrect. We suggest that this area of the analysis be thoroughly reconsidered, that more specific detail be

ATTACHMENT B



- LEE B. DUBOC, Mayor
MICKIE WINKLER, Mayor Pro Tem
PAUL J. COLLACCHÉ, Council Member
NICHOLAS PULLINS, Council Member
CHARLES M. KINNEY, Council Member

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Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

provided in the report and that consideration be given to transplanting trees rather than removing them. We would also suggest that planting new trees be given consideration as mitigation for the loss of existing trees.

- Regarding visual impacts, it seems certain that many in Menlo Park will consider the prospect of catenary wires, insulators, support poles and mast arms, portal support frames in the station areas and higher poles and wires for the distribution system unsightly. And because the impacts of tree removal associated with the project have not been clearly documented in the DEIR (see point above), it is evident that the visual impacts are likely to be more extensive than analyzed in the DEIR. To be a fair indicator of likely visual impact, the DEIR needs additional photo-simulated views that combine the effects of introduction of the electrification overhead gear together with those of the project's tree removal effects. Tree planting and other landscape treatments should be considered as mitigation for the visual impacts created by the project.
- The DEIR claims the potential for substantial noise reduction benefit as the result of electrification. However, in areas near grade crossings, any such benefit would be imperceptible because of the continued impacts of the much more disturbing train horn soundings. In Menlo Park, where there are four grade crossings in the corridor's 1.5 mile traversal of the community and two more, one just north and one just south of City limits, for an average of one grade crossing every quarter-mile, the adjacent land use in Menlo Park along the entire corridor is adversely impacted by train horn noise. Until grade separations or other actions eliminate the routine sounding of train horns at grade crossings, the claimed noise reduction benefits of the electrification project will generally be unperceived by the public. To eliminate the inaccurate portrait of noise reduction benefit that the DEIR currently presents, the document should provide noise contour maps for the alternatives in which the effects of train horn noise are considered as well as the other forms of train noise.
- On page 2-53, the DEIR opines that grade separating the entire system would delay electrification for several years. It also states that grade separating the entire line would increase costs with no commensurate improvement in train service. This particular assertion appears unfounded given that a fully grade separated system is an adopted goal of the JPB. We question this conclusion of the DEIR given the substantial history of grade crossing accidents on the line that grade separations would avert, given the serious disruption to system reliability that results when a rail accident occurs at a grade crossing and given that the claimed noise-reduction benefits of the electrification project generally will not be truly realized until and unless completion of grade separations eliminates the most disturbing noises created by train horns and wayside warning devices. Contrary to the

statement of the DEIR, grade separations are obviously not just a benefit-less cost to the rail system. From the perspective of a community that is substantially benefited by Caltrain service but significantly adversely impacted by certain aspects of Caltrain operations that relate to a lack of grade separations (the train horn noise, congestion and safety at the grade crossings) a fair argument can be made that what the JPB should be doing is using first available funding to grade-separate the entire system and using later funding to do the electrification, in which case: 1) the claimed noise-reduction benefits would be realized because the train horn noise would be eliminated and 2) the electric third rail system that avoids all the overhead equipment many people may consider unsightly may prove most practical.

If electrification precedes complete grade separation of the Caltrain line, during any subsequent grade separation project, the electrification gear will need to be moved over to the shoofly and back again to the permanent tracks, an activity that obviously adds complexity, cost and time to any grade separation project. Less obvious but nonetheless significant, aside from moving the electrical system twice, just having to work near the hot wires while doing the ordinary grade separation construction activity will add complexity, time and cost and may also necessitate more intrusive and disruptive temporary construction easements. These are significant considerations for communities that are prospective candidates for grade separations.

- The DEIR notes that the statewide high-speed rail operation that hopes to operate in the Caltrain corridor will need the high voltage overhead type system and that cost-efficiency could be realized by having the Caltrain electrification compatible with it. However, at this point the statewide high-speed rail is nothing more than a speculative project; it is not assured of moving forward. Therefore, it may be premature to lock-in an electrification technology decision on the presumption that high speed rail will be under construction soon to share electrification costs with Caltrain. Caltrain may be wise to defer decision making on the details of electrification until the fate of the statewide high speed rail project is determined. If the statewide high-speed rail project proves a non-starter, Caltrain might be well advised to rely on the less intrusive electric third rail type system rather than the overhead system that high-speed rail would require and that some may regard as unsightly.
- The "Public Services and Facilities" section of the DEIR contains no information about the potential safety risks of the electrified system. What happens when 'hot wires' fall down due to some kind of incident (storm winds, motorist collision with support, etc.)? How quickly does the power get shut off? How frequently do such incidents happen in areas like the Boston to Washington corridor where such systems are operational? The DEIR is

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

completely lacking regarding information of this type. Such considerations should be addressed in the document.

ATTACHMENT C

Thank you again for the opportunity to comment on the Draft Environmental Impact Report.

Sincerely,

Kent Steffens
Kent Steffens
Director of Public Works

cc: Mayor and Members of City Council
City Manager
Community Development Director
City Attorney
Town Council Members – Town of Atherton,
Via: Jim Robinson, City Manager

HELENE PETERSSON
MAYOR
ANDREW COHEN
MAYOR PRO TEM
JOHN BOYLE
COUNCIL MEMBER
RICHARD CLARE
COUNCIL MEMBER
KEYWARD ROBINSON
COUNCIL MEMBER

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701 LAUREL STREET, MENLO PARK, CA 94025-3483
www.menlopark.org

July 23, 2007

Dumbarton Rail Corridor Policy Advisory Committee
1250 San Carlos Avenue
San Carlos, CA 94070-1306

Honorable Chairman Green and Members of the Committee,

Menlo Park City Council recently held two meetings to educate the Council, staff, and the community about the plans for the Dumbarton Rail Corridor (DRC) project. At these meetings, a number of issues of concern about the project were raised. On July 19, 2007, the Council voted unanimously to submit a letter to the DRC Policy Advisory Committee (PAC) listing the City's primary concerns and requesting a response to these concerns. Menlo Park submits this letter to the PAC now, recognizing that policy direction given by the PAC now and in the future will significantly impact how these issues are addressed and resolved.

The City of Menlo Park strongly supports the goal of increasing public transit throughout the region and in particular along the Dumbarton corridor. Clearly the Dumbarton Rail project could bring many benefits, including enhancement of our local and regional economies. However, if not properly mitigated, this project will result in significant impacts on several Menlo Park neighborhoods. In addition, careful consideration must be given to all project alternatives to ensure the best use of voter-approved transit dollars.

Menlo Park hopes that this letter will serve to open a dialogue with the PAC around the issues raised by the project. The primary items of concern are:

1. Freight – Menlo Park is concerned about freight trains using the Dumbarton rail line and its impact on residents and traffic in the area. The project should eliminate the possibility of freight on the Dumbarton Rail line.
2. Cost Projections – Include all costs, and in particular estimates for the cost of mitigations, in the cost projections for each proposed option so that alternatives can be compared on an equivalent basis.
3. Ridership Data – This data has changed over time based on new information and updated models. The model is complex and involves many factors. The ridership estimates, model assumptions, and model parameters need to be clearly explained and provided to the public. A detailed explanation of the differences in ridership between the various alternatives needs to be provided.

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

ATTACHMENT D

4. **Electrification** – The project should include electrification or the possibility to easily implement electrification, without further construction, to reduce air pollution and fit with the current plan to electrify the Caltrain mainline. One specific alternative that should be considered is the use of lighter electric vehicles such as the ones proposed for the Caltrain mainline. We understand that Caltrain has made significant progress with Federal regulators so that lighter electric vehicles could be used on the Caltrain mainline. Since the Dumbarton trains will be integrated into the Caltrain mainline at Redwood Junction, using the same vehicles throughout the Caltrain system would maximize operational efficiencies. These lighter vehicles provide more flexibility, less pollution, and noise.
5. **Alternatives** – Make a fair, thorough and realistic comparison of alternatives, including increased bussing and Bus Rapid Transit. These alternatives may have a reduced cost and could be implemented with a phased approach.
6. **Mitigations** – The project plan should include mitigations to address the impacts of each option under consideration. The City cannot support a plan that does not budget funds for noise and vibration mitigation. These mitigation measures need to be thoroughly studied and alternatives developed. They are an integral component to the project and need to be included in all future cost estimates for the project.
7. **Traffic** – The rail service will increase delay on several already-congested roadways in Menlo Park. The impact of the rail service on traffic in the area needs to be analyzed using properly validated models. Options for mitigating the increased traffic delay should be considered, including advanced signal timing, grade separations, etc.

Menlo Park has previously submitted communications regarding the DRC project. These include a letter from Mayor Borak in 2000, and a letter from Mayor Winkler in 2006. Many of the policy issues raised in those letters remain unresolved. In addition, comments from the City on the Notice of Preparation for the environmental process were submitted in 2006.

Menlo Park trusts that the Dumbarton Rail PAC will seriously consider the issues raised in this letter. Menlo Park requests and looks forward to your response.

Respectfully submitted,


 Kelly Ferguson
 Mayor

KELLY FERGUSSON
 MAYOR
 ANDREW COHEN
 MAYOR PRO TEM
 JOHN BOYLE
 COUNCIL MEMBER
 RICHARD CLINE
 COUNCIL MEMBER
 HEYWARD ROBINSON
 COUNCIL MEMBER

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701 LAUREL STREET, MENLO PARK, CA 94025-3483
 www.menlopark.org

August 29, 2007

Ms. Katie Balk
 Regional Rail Project Offices, c/o BART
 300 Lakeside Drive, 16th Floor
 Oakland, CA 94612

Subject: Comments on the San Francisco Bay Area Regional Rail Plan

Dear Ms. Balk:

Thank you for the opportunity to comment on the San Francisco Bay Area Regional Rail Plan. The City of Menlo Park supports your efforts to plan for future improvements to the rail system that incorporates both passenger trains and freight service.

City representatives attended the Regional Rail Plan Community Workshop held in San Carlos, and received a copy of the Regional Rail Plan Draft Report Summary dated August, 2007. The City's comments will focus specifically on this document.

Plan and Budget for Adequate Mitigation of Service Expansion Impacts. Menlo Park and much of the San Francisco Peninsula are currently near built-out conditions, with substantial residential areas near or immediately adjacent to the Caltrain right-of-way. As the Caltrain system has changed over the years from a freight line to a mostly commuter railroad, the frequency and speed of trains have dramatically increased. Most of the impacts (e.g. noise, vibration, diesel exhaust, and traffic congestion at crossings) affect those residents nearest the tracks. As any future expansion of service is along the Caltrain right-of-way is planned, it is imperative that projects be designed and funded to include mitigation of those impacts.

Section 10.0, Next Steps of the Draft Report Summary acknowledges that cost estimates are currently at an "order of magnitude level of detail" and that more refinement is needed as projects are developed further. Too often, engineering studies of this magnitude focus only on the infrastructure required to deliver a functional system. Prudent mitigation measures can become an unaffordable extra cost to the project if they are not included from the beginning. Realistic mitigation costs for increased noise, traffic impacts at crossings and other impacts should be built into cost estimates now. Making the environment around the rail corridor more livable will help promote transit-oriented development and increase future ridership.

Attachment to Submission 58 (Kirsten Keith, City of Menlo Park, February 21, 2012) - Continued

Letter to Katie Balk
Page Two
August 29, 2007

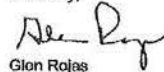
The City of Menlo Park has been closely following the planning efforts for the Dumbarton Rail Project. Similar concerns about planning for and funding mitigations for impacts of this project were recently raised in a letter from Menlo Park's Mayor, Kelly Fergusson to the Dumbarton Rail Corridor Policy Advisory Committee. A copy of the letter is attached for information.

Integrate the Regional Rail Plan with Other Transit Modes. More work is needed to better integrate rail services with other transit modes such as buses and feeder shuttles. As alternatives for rail travel expand, providing time-coordinated transit options to deliver passengers to and from rail stations will be an important component that appears to have received little attention in the Regional Rail Plan. The efficiency of the rail station feeder system will significantly affect ridership and, ultimately, capital costs and operating expenses. Further studies should identify the best ways to get passengers to and from rail stations, and those costs should be built into the overall plan.

Better Balance the Needs of Local Service and Regional Express Service. The City of Menlo Park remains concerned about local Caltrain service being sacrificed for the sake of regional express services. The Regional Rail Plan relies heavily on transit-oriented development (TOD) to increase future transit ridership in the Bay Area. This strategy can be effective only if relatively frequent service is available at a large number of rail stations. Only so much land is available for TOD around regional express stops. Frequent local service maximizes the potential for TOD and future ridership increases.

Thank you for considering these comments. The City of Menlo Park appreciates the opportunity to comment on this important plan. If you have questions regarding the City's comments please contact the City's Director of Public Works, Kent Steffens at 650-330-6781.

Sincerely,



Glen Rojas
City Manager

Attachment: Letter from Mayor Fergusson to the Dumbarton Rail Corridor Policy Advisory Committee

cc: Members of City Council
Director of Public Works
Transportation Manager

RICHARD CLINE
MAYOR
JOHN BOYLE
VICE MAYOR
ANDREW COHEN
COUNCIL MEMBER
HEYWARD ROBINSON
COUNCIL MEMBER
KELLY FERGUSSON
COUNCIL MEMBER

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701 LAUREL STREET, MENLO PARK, CA 94025-3483
www.menlopark.org

April 22, 2010

California High Speed Rail Authority
Attn: California High Speed Train
Central Valley to Bay Area High Speed Rail Program EIR/EIS
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: City of Menlo Park Comments on the Revised Draft Central Valley to Bay Area High Speed Rail Program EIR/EIS

Members of the Authority:

The City of Menlo Park has continued concerns that the revised EIR doesn't have sufficient information to fully evaluate and reach a conclusion regarding the optimal route into the Bay Area. The Authority should continue to make all efforts to analyze alternate routes and/or methods in order to avoid significant adverse impacts to the Peninsula area from the alignment of the High Speed Train (HST).

The Authority has indicated in the notice for comments on the EIR that responses are only required for those portions of the DEIR/EIS that it has modified since the prior circulation period. The City disagrees that this requirement fits within CEQA. Rather, the standard is that set in *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112. Under that standard, public comment must be allowed if there is new information or changed circumstances that have arisen since the EIR was last circulated, and that information/circumstances indicates that the project will have new or substantially increased impacts, or "if the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect." There have been several circumstances that justify comments beyond the changes the Authority has explicitly made in the EIR. These include, but are not limited to, new ridership information, updated Business Plan, and the potential issues related to the Union Pacific railroad and their rights to use the tracks.

Response to Submission 58 (Kirsten Keith, City of Menlo Park, February 23, 2012)

58-134

The Partially Revised Draft Program EIR, which includes the prior environmental analysis in the 2008 Final Program EIR and 2010 Revised Final Program EIR, evaluated multiple alternatives that would avoid the Caltrain Corridor on the Peninsula in whole or in part. The Authority is using a tiered environmental review process for its general route decision into the Bay Area from the Central Valley. The level of detail and scope of information provides a sufficient basis for decision making because it identifies the broad differences between alternatives. Please refer to Standard Response 3 for a discussion of the level of detail for impacts analysis and mitigation for a program EIR.

58-135

The City of Menlo Park's preference for a primarily two-track blended system configuration or four tracks underground is acknowledged.

58-136

The Authority has followed CEQA Guidelines Section 15088.5 in preparing its notices and introductory text for the Partially Revised Draft Program EIR. That Guideline specifically provides that a lead agency may request that reviewers limit their comments to the materials that have changed. The Authority's process has therefore complied with CEQA.

Moreover, the Authority deliberately and thoroughly considered whether new information and changes conditions since the EIR last circulated would result in a need to change any of the prior analysis in Chapter 5, entitled "New Information and Changed Conditions Since September 2, 2010, Prior Decisions." This chapter specifically addresses the Authority's Draft 2012 Business Plan, which was released on November of 2011. The public was invited to comment on the materials in Chapter 5, and the Authority received extensive comments on this chapter.

The Authority is providing responses to all comments received on the Partially Revised Draft Program EIR. These comments may or may

not include a discussion as to how changed circumstances affect the analysis in the Partially Revised Draft Program EIR. *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal. 4th 1112 concerned the requirements for recirculation and what constitutes significant new information under CEQA and did not specifically address limitations on the types of comments to which responses must be provided. The basic standard of CEQA is good faith disclosure such that an evaluation of the physical environmental impacts of a project may be identified. Limiting the comments to the new information in the Partially Revised Draft Program EIR does not deprive the public of a meaningful opportunity to comment on a substantial adverse impact of the project or a feasible way to mitigate or avoid such an effect. The lead agency must evaluate and respond to comments as provided in Guidelines Section 15088, which provides that written responses must describe the disposition of any "significant environmental issue" raised by commentators. Responses have been provided for comments received on the Partially Revised Draft Program EIR that were received during the public comment period.

58-137

The Authority acknowledges the City of Menlo Park's concerns regarding potential HST system effects on the City from several of the network alternatives examined in the Bay Area to Central Valley Partially Revised Program EIR.

58-138

The Authority acknowledges that the City of Menlo Park has attached its comments on the 2010 Revised Draft Program EIR. These comments were responded to in the August 2010 Revised Final program EIR. Many of the same comments are also presented in the current comment letter and are responded to below. The Authority will consider the comments, responses, and the entire record before it in making its decisions and all comments on the 2010 Revised

Draft Program EIR remain part of the administrative record for the project.

58-139

As discussed in Chapter 3 of the Partially Revised Final Program EIR, the increase in traffic congestion related to the loss of parallel lanes in limited areas along the San Francisco to San Jose corridor is considered a new significant impact for the corridor as a whole. The intersection of Ravenswood/Alma is identified as a location where there would be a significant increase in traffic congestion in the PM peak hour when comparing existing conditions versus existing plus HST, and also when comparing anticipated future condition in 2035 to anticipated future condition in 2035 plus HST. Please refer to Response to Comment 40-265 for information on why trips from Alma were conservatively assigned to El Camino Real instead of distributed across the extensive network of parallel streets. Please refer to Response to Comment 40-286 regarding mitigation strategies.

58-140

The comment suggests that the Authority should have a new ridership forecasting model developed by an independent group, and then use the new model in its Program EIR. The Authority does not agree with this comment. The ridership model was developed by experts in the field and was peer reviewed. The City of Menlo Park and other parties in the *Town of Atherton CEQA* case challenged the adequacy of the ridership model in litigation and the court concluded the model was supported by substantial evidence.

Nevertheless, the Authority CEO formed an independent ridership peer review group to review the model developed by Cambridge Systematics for the Metropolitan Transportation Commission. The panel was charged with providing a comprehensive in-depth review of the models used to estimate ridership and revenue and the forecasts derived from them. The five member group consists of experts from academia and public agencies in the United States, Canada, and Switzerland. The panel concluded that model produces results that are reasonable and within expected ranges for the current environmental planning and Business Plan applications of the

model. While the comment states that two of the five members cannot be considered unbiased, the comment does not provide facts indicating bias.

Please also refer to Standard Response 4 in the 2010 Revised Final Program EIR, Comments about the Ridership forecasts, and Standard Response 8 in the 2010 Revised Final Program EIR, The Authority's Business Plan (refer to Chapter 12 of the 2010 Revised Final Program EIR).

58-141

The 2012 Draft Business Plan for the HST system describes how the system will be built in phases over time. It utilizes conservative projections of both available funding and ridership to explain the feasibility of the system, and explains in detail how a financially viable system can be built and operated; including the potential use of private funding.

58-142

The comment appears to be directed to the Authority's Draft 2012 Business Plan rather than the Partially Revised Draft Program EIR. The Authority acknowledges the City of Menlo Park's preference for a primarily two-track blended system configuration with no expansion to a four track system. Please refer to Standard Response 1 for a discussion of the blended system approach and how it related to the Program EIR.

58-143

The 2008 Final Program EIR analyzed alternatives that would stop in San Jose (Pacheco Pass) and Union City (Altamont Pass) as the northern terminus station. The Partially Revised Draft Program EIR provided further analysis of what would happen if San Jose or Union City were a temporary northern terminus, with riders disembarking from HST and board connecting transportation services. Please also see the Authority's response to a similar comment from the City of Menlo Park in 2010, Response to Comment L017-10 in volume 2 of the 2010 Revised Final Program EIR.

The blended system approach described in Chapter 5, Standard Response 1, and the Draft/Revised 2012 Business Plan would

address the scenario identified in the comment. The Authority agrees that the definition of a blended system may include key grade separations, track improvements, electrification, and safety improvements.

58-144

As part of the first-tier project to choose a network alternative to connect the Bay Area and the Central Valley, the Authority will not make a decision on the vertical profile of the track. The vertical profile of the track is a design detail that will be considered as part of second-tier project planning and environmental review if an alignment between San Francisco and San Jose is included in the selected network alternative in whole or in part. The Superior Court in the Atherton 1 case held this approach complied with CEQA.

The Authority's previous Programmatic decisions for the Bay Area to Central Valley included a commitment to consider vertical profile variations as part of second-tier project planning and environmental review. The Authority expects that a similar commitment would be included in the staff recommendation for the anticipated decisions based on the current Partially Revised Final Program EIR. Vertical profile variations will be considered in any blended system approach.

The comment further addresses the level of detail of the Supplemental Alternatives Analysis Report for the San Francisco to San Jose second-tier project, which was put on hold as of May 2011. Alternatives in the Supplemental Alternatives Analysis were evaluated based on goals of constructability, right-of-way requirements, minimization of disruption to Caltrain, minimizing construction costs, and the ability of the alternatives to meet community needs. If an alignment along the Caltrain Corridor is part of the selected network alternative, the Authority will consider the City's comments about second-tier vertical profile alternatives as part of that process. The process may start afresh, with a new Notice of Preparation or a Supplemental Alternatives Analysis.

58-145

Individual grade separations along the HST alignment alternatives have not been viewed as major differentiators in the 2008 Final Program EIR. The Partially Revised Draft Program EIR, Chapter 5,

provides a discussion of grade separation impacts at a general level of detail. More detailed information about the benefits of grade separations will take place as part of second-tier planning and environmental evaluation, based on 15% design.

The Authority acknowledges that there will be a need for many grade separations along the Caltrain Corridor, however, there are numerous areas along the Caltrain Corridor that are already grade separated. In addition, the need for grade separations along the Caltrain Corridor are not measurably more intensive than grade separations in other highly urbanized corridors along alignment alternatives in the study area. (Kiesling, Memorandum on Grade Separation Density, 2012.)

Please also refer to Standard Response 3 regarding the appropriate level of detail for impacts analysis and mitigation for a Program EIR.

58-146

The Authority acknowledges that the 1863 Southern Pacific Railroad Station (now the Menlo Park Caltrain Station) was listed in the National Register of Historic Places in 1974.

The Authority does not concur with the statement in the comment that the analysis of impacts is inadequate. The 2008 Final Program EIR, chapter 3.12, analyzed the impacts of the different alignment alternatives in the study area for effects on cultural resources, including historical resources under CEQA. This analysis was supplemented in the 2010 Revised Final Program EIR. The methodology for analysis at the program level involved identifying numbers and types of resources for each alignment and examining the relative differences among alignments. As indicated in the text, this analysis was based in part on the cultural resources report prepared for the 2005 Statewide Program EIR/EIS. (Bay Area to Merced, Cultural Resources: Historic Architecture Technical Evaluation [JRP Historical Consulting Services 2004].) This report acknowledges the historical resource status of a number of former Southern Pacific Railroad stations on the San Francisco Peninsula which were included in the count of over 50 historic architecture cultural resources on the Peninsula. Impacts on cultural resources

are identified as significant at the program level and mitigation strategies are identified.

Under Section 106 of the National Historic Preservation Act (36 CFR § 800), the procedures to be followed at the project level include identification of resources, evaluation of their significance under the National Register of Historic Places and CEQA, identification of any substantial adverse effects, and evaluation of potential mitigation measures. Specific resources within the Area of Potential Effects will be further examined in detail at the project level because the identification of potentially affected resources and project effects and mitigation are dependent on the HST location and system design, and can only be done at the project level.

Please refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation for a Program EIR.

58-147

The Authority acknowledges the City of Menlo Park's concern regarding the appearance of the overhead catenary system for the electrified HST. Any electrification would be compatible with both Caltrain and HST. Only one overhead catenary system would be necessary. The 2008 Final Program EIR, chapter 3.9, analyzed the aesthetic and visual impact of the overhead catenary system, including electric wires and poles. The visibility of the overhead catenary system along the Caltrain Corridor is acknowledged, as well as the potential need to remove mature trees. Impacts are identified as significant at the program level and mitigation strategies are identified. The potential differences in impacts from different vertical profiles are discussed in this chapter. Please refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation for a Program EIR.

58-148

The final court judgment/ruling in the Town of Atherton litigation required the Authority to provide additional analysis of the noise and vibration effects of freight trains potentially travelling on the outside tracks of an expanded, four-track right-of-way on the San Francisco Peninsula. This noise and vibration analysis is included in Chapter 2, Section 2.3, and in the January 2012 Bay Area to Central Valley

High-Speed Train Partially Revised Draft Program EIR, Noise and Vibration Technical Memorandum: San Francisco Peninsula Freight Tracks which was available upon request. As in the 2008 Final Program EIR, Chapter 3.4, noise and vibration impacts are identified as significant and mitigation strategies identified. Sound barriers were identified as a mitigation strategy in the 2008 Final Program EIR. Mitigation measures for noise such as sound barriers will be predicated on the more detailed design and engineering information that will be available in project-level analyses. Chapter 2 of the current document also identifies building sound insulation as a mitigation strategy. Vibration mitigation is less predictable at the program level of analysis, and therefore the vibration impacts are considered significant even with application of mitigation strategies.

The Authority does not agree that sound barriers along the Caltrain Corridor would divide the community and adversely affect its residential character, given that a number of walls currently exist between the rail corridor and residences. As noted in Chapter 3.7, Land Use, in the 2008 Final Program EIR, the San Francisco to San Jose Corridor would be primarily within an existing active commuter and freight rail corridor and therefore would not constitute any new physical or psychological barriers that would divide, disrupt, or isolate neighborhoods, individuals, or community focal points in the corridor. This resulted in a finding of no community cohesion impacts at the program level. In addition, construction of grade separations where none currently exist would improve circulation between neighborhood areas.

Secondary effects, such as visual impacts, relating to the use of noise mitigation strategies were considered in the 2008 Final Program EIR, chapter 3.9, at a very broad scale, which is appropriate for this program-level of analysis. Furthermore, although these program EIRs provide a base from which project-level EIRs may tier from, they do not restrict the type of mitigation measures that may be considered to mitigate impacts. The aesthetic and community effects of sound barriers will be addressed in more detail as part of second-tier project development and environmental review when it will be possible to identify specific locations and size of sound barriers. As noted above, the Caltrain Corridor already

includes many walls of varying age, condition, and associated landscaping. With implementation of the project, these existing walls may be replaced with consideration of maintaining a high level of visual quality in neighborhood areas by implementing such measures as visual buffers, trees, and other landscaping, architectural design, and public artwork as noted in Chapter 3.7 of the 2008 Final Program EIR. Refer also to Response to Comment 40-262 and 47-243.

58-149

The alignment on the Caltrain Corridor between San Francisco and San Jose would provide community benefits by grade separating the right-of-way and eliminating current freight/commuter rail conflicts with vehicular and pedestrian cross traffic. We do not agree that the proposed project is creating an enhanced environment for freight activity because trains can travel faster. For the Caltrain Corridor, freight operations are restricted to specific conditions and times under a trackage rights agreement between Union Pacific Railroad and the Peninsula Corridor Joint Powers Board, who owns the right-of-way. The rights of Union Pacific Railroad under this agreement will be respected and there is currently no intent to alter the windows for freight activity in the corridor. It is therefore speculative to assume increased freight traffic on the UPRR rail lines as a result of the proposed project. It is also speculative to assume that a new Bay crossing along the Dumbarton alignment "may" open this corridor up to freight traffic. The currently proposed Dumbarton Corridor Rail Project, proposed by San Mateo County Transportation Agency, has been characterized as passenger rail, not freight rail. (SMCTA, Dumbarton Rail Corridor Alternatives, 2011.) It is therefore speculative that a Dumbarton crossing would result in additional freight traffic with related noise and vibration impacts beyond what is analyzed in the Program EIR, with mitigation strategies provided.

58-150

The Authority does not agree with the characterizations of the proposed funding for the statewide HST system and its individual second-tier projects. The 2012 Draft Business Plan for the HST system describes how the system will be built in phases over time. It utilizes conservative projections of both available funding and

ridership to explain the feasibility of the system, and explains in detail how a financially viable system can be built and operated; including the potential use of private funding. The Business Plan is consistent with requirements in Proposition 1A. There is currently no Proposition 1A funding plan for construction of any component of HST within the Bay Area to Central Valley study area.

58-151

Impacts on different resource areas received examination based on different analytical distances, as appropriate to the subject matter. For an existing rail corridor like the Caltrain Corridor, property impacts were examined within 50 feet of either side of the rail corridor. Land use compatibility, communities and neighborhoods, and environmental justice were based on 0.25 miles on either side of the centerline of the rail corridor and around station areas. Impacts on aesthetics were not limited to 50 feet on either side of the HST corridor. The context for an evaluation of aesthetics was those properties with views of the proposed project; in some cases this could be immediately adjacent and in others, where there are view corridors, much farther away. The noise and vibration impacts of the HST would vary depending on whether the nature of the alignment. For the Peninsula, Chapter 2 explained that noise impacts were examined using a screening distance of 375 feet on either side of the guideway (i.e., alignment) centerline

58-152

The Authority does not agree with the comment that Caltrain service levels would be diminished with HST on the Caltrain Corridor or that the Program EIR analysis is inadequate. In the 2008 Final Program EIR a typical configuration was assumed consisting of the two inside tracks for HST and Caltrain express service operating at compatible speeds and the outside tracks for Caltrain local service and temporally separated freight service. The shared four-track system enables express service to pass local service at each station and maintains schedule reliability. The shared tracks also enable the HST to run fast express service between San Francisco and Jose to achieve 30 minute travel times and provide high frequency service. The Federal Railroad Administration prohibits "mixed traffic" – operating standard American trains and lighter rail equipment on the

same tracks. However, Caltrain has received a waiver from the FRA. To avoid collisions, Caltrain will use an enhanced signal system that includes federally mandated Positive Train Control to prevent trains from colliding with each other, with other vehicles or with fixed objects. In addition, Caltrain equipment will use the latest Crash Energy Management technology to distribute or “manage” the energy from a collision, protecting the passengers onboard the train. The waiver allows Caltrain to operate all passenger trains, whether diesel or electric, to run on the same tracks. The Authority will have to seek its own waiver, but the Caltrain waiver is a clear precedent that should help the Authority’s waiver request succeed. As noted in the 2008 Final Program EIR, Caltrain is viewed as a complimentary feeder system to the HST system. The Program EIR identified shared stations in San Francisco at the Transbay Terminal, the Millbrae Caltrain / BART Station (to serve SFO), a potential station at Palo Alto or Redwood City, Diridon Station in San Jose, and the Gilroy Caltrain Station. This distribution of stations along the Caltrain Corridor would enable a short trip from any Caltrain station to connect to the HST at a joint station, expanding convenient access to the HST along the Caltrain system.

Overall, the HST system would improve inter-modal connectivity with local and commuter transit systems. Prop 1A ensures that complementary rail capital improvements would be funded by a \$950 million portion of bond funds. These funds must be allocated to intercity, commuter and urban rail systems and shall provide direct connectivity and benefits to the HST system and its facilities or be part of the construction of the system.

The Revised 2012 Business Plan incorporates more information about a blended system approach for the “bookend” sections of the HST system in the highly urbanized areas of the San Francisco Bay Area and Los Angeles Basin.

58-153

The 2008 Final Program EIR discussed construction impacts for the various alignments. Chapter 4 of this document describes construction impacts in more detail, and discusses the need for temporary construction easements, temporary shoofly tracks, as well as construction-related traffic, and noise.

58-154

The comment correctly identifies that implementation of the HST between San Francisco and San Jose would require acquisition of additional right-of-way in some area. The Authority may purchase right-of-way from willing sellers, and also has legal authority to proceed by eminent domain. Eminent domain is the government power to acquire private property for public use and to compensate property owners based on the fair market value of their property taken by the government. (United States Constitution, 5th and 14th amendments; California Constitution, Article I.) Any property acquisition and relocation efforts by the Authority will be required to comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 as amended and Title VI and Title VIII of the Civil Rights Acts of 1964 and 1968, respectively. Any such efforts must follow the completion of project EIRs and the decisions to be made by the Authority about the placement and design of facilities in the system. A parcel-by-parcel evaluation of real property acquisition is beyond the scope of this first tier, program EIR. This level of analysis will become part of the second-tier EIR process.

To provide additional information to the public, the Authority has prepared and posted on its website in English and Spanish a pamphlet titled “Your Property, Your High-Speed Rail Project” (California High-Speed Rail Authority 2009d). The pamphlet is listed in the website Library under the topic “Right-of-way.”

58-155

The Authority acknowledges that Union Pacific Railroad has contractual rights to provide intercity rail service along the Caltrain Corridor. This factor has been and will continue to be considered in the decision making process. While reaching agreement with the Union Pacific Railroad is needed before actions can be taken that affect their property and operations, the certification of the Partially Revised Final Program EIR does not require any such agreement to have been reached.

58-156

Capital costs in the 2008 Final Program EIR and the 2010 Revised Final Program EIR included grade separation costs, as well as the cost to procure and install line infrastructure and facilities, systems, and removal of existing infrastructure. (Refer to 2010 Revised Final Program EIR, Chapter 5.) Grade separation unit costs are identified in the 2008 Final Program EIR, Appendix 4-A. The Authority agrees that a total financial picture is essential for the final decision. Cost information is not, however, required to be included in an EIR.

58-157

At this phase of project development it is yet not known if any existing grade crossings would require closure. However, the Authority is committed to maintaining existing crossings to the greatest extent feasible within engineering constraints and improving existing crossing safety and circulation by grade-separating train traffic from vehicular, bicycle and pedestrian traffic. It is anticipated that this will result in an overall improvement in traffic circulation and will remove some existing barriers to bicycle and pedestrian crossing. This level of detailed evaluation will be analyzed in the project-level document, which will specifically look at impacts on bicycle, pedestrian and automobile access and circulation. See section 3.7.5 (B) in the 2008 Final Program EIR regarding mitigation strategies to maintain neighborhood connectivity and integrity.

58-158

The comment suggests that the Program EIR is not sufficiently detailed for decision making purposes. The Authority does not concur with this statement. Impacts such as tree removal, view corridor effects, and the effects of grade separations are analyzed in the EIR. The Authority finds the level of detail adequate for decision making. The rationale for identifying Pacheco Pass as the environmentally superior alternative is discussed in Chapter 6 of the January 2012 Partially Revised Draft Program EIR.

58-159

The Authority appreciates the City of Menlo Park's continued participation in the programmatic environmental review process for

the Bay Area to Central Valley portion of the HST system and the identification of comments and issues unique to Menlo Park. The Authority does not agree that the Program EIR lacks sufficient detail for decision making. The level of detail and scope of information provides a sufficient basis for decision making because it identifies the broad differences between alternatives. Please refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation for a Program EIR.

Submission 59 (Theresa DellaSanta, Town of Atherton, February 21, 2012)



Town of Atherton
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February 21, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
Attn: Bay Area to Central Valley HSR Partially Revised Program EIR Comments

Dear Mr. Mason

Following are comments submitted by the Town of Atherton in response to the Partially Revised Program EIR for the Bay Area to Central Valley HSR.

59-128

We call your attention that there are still two open court cases filed by Atherton and other plaintiffs regarding the Program EIR which have yet to be resolved. The Town undertook these actions as a means to underscore its opposition to having the HSR use the Caltrain corridor from the Central Valley to San Francisco. We will continue to vigorously oppose this alternative as long as the Authority is committed to an ultimate four track system which the Business Plan and the Partially Revised EIR continue show in their plans.

The draft EIR/EIS for the San Jose to Merced section is premature since it is dependent on an approved Program EIR which includes the Pacheco Pass alignment. There currently is no certified Program EIR for the Central Valley to San Jose alignment that has passed the test of a court challenge as being the environmentally superior alternative.

Consequently, all expenditures for work on the Bay Area to Central Valley portion of the HSR project should be halted until an adequate alternatives analysis, including the use of the various Altamont Pass and Pacheco alignment options have been studied.

59-129

The so called, "blended system" using the existing Caltrain two tracks should be considered and studied as being the ultimate configuration of the San Jose to San Francisco project. This configuration should be considered on its own merits as a separate alternative. The Revised EIR should include an analysis of the ridership capacity study and expected ridership/revenue using a two track system.

59-129

The Town of Atherton requests that the Authority remove from the Revised EIR any and all references to an eventual 4-track alignment using the Caltrain corridor. The Authority is aware that the "blended system" approach as proposed by Congresswoman Eshoo, Senator Simitian and Assemblymember Gordon included the statement that if the HSR uses the Caltrain corridor it should be limited to 2-tracks. Yet, at the moment, it cannot be said that the Authority is embracing the "blended system" because the "blended system" refers to several elements, including that the ultimate configuration would be a 2-track system.

Especially given the need to examine a two-track "blended system" alternative, the Revised EIR should include a new ridership analysis using a new model developed by an independent, unbiased, and professionally authoritative body. The University of California at Berkeley's Institute for Transportation Studies contains the professional resource, knowledge and reputation of being the type of independent body that the Authority should ask the California Department of Transportation to engage in doing this study. Using the results from this study, the alternate Central Valley to Bay Area alternatives should be re-analyzed to determine which would serve the greatest ridership for the system.

Studies done before the formation of the Authority had all concluded that the Altamont Pass route was superior to the Pacheco Pass route in terms of serving greater potential ridership. In all likelihood, an unbiased and independent modeling of the project by the University will reach the same conclusion i.e. the Altamont Pass route is the superior alternative. Indeed, the current chair of the Authority's Board of Directors has publicly admitted that the selection of the Pacheco Pass route was motivated by political considerations due to certain members of the Authority's board of directors, at that time. Given the biased origin of the choice, it must be revisited in an unbiased manner.

59-130

It would appear on its face that the environmental impacts would be far greater with a four track system along the entire Caltrain corridor than using any of the Altamont Pass options. Fewer communities will be affected and less significant environmental impact would result. This would be especially true if the Altamont alignment followed the corridor being proposed for the Regional Altamont Rail Corridor, with service to San Francisco either through a "blended" approach using a rebuilt Dumbarton Rail Bridge¹ or through the South Bay using the existing two-track Caltrain corridor.

Using a four-track system along the Caltrain corridor will do significant environmental harm to the Town of Atherton, as an example. The aerial option is unacceptable to the Town and the neighboring communities which would also be impacted if an aerial structure was used in Atherton for HST. As acknowledged in the revised DEIR, this would mean cross streets would have to be closed and/or a significant amount of costly Atherton real estate would have to be taken. All of these alternatives would cause an enormous hardship on our community and our neighbors with absolutely no benefits to be derived by having HST going through the heart of our community. Consequently, The

¹ A rebuilt Dumbarton Rail Bridge has already been proposed in conjunction with the proposed Caltrain transbay service to Union City. If this service were electrified, as has already been proposed for Caltrain Peninsula Service, joint use would be equally feasible here.

Submission 59 (Theresa DellaSanta, Town of Atherton, February 21, 2012) - Continued

59-130

Town of Atherton would be forced to oppose in every way it could to changes in the Caltrain corridor that would harm our community.

The information re noise, vibration and eminent domain impacts during construction and operation of a HST system through Atherton is not adequately disclosed. There is no detail information that would allow us to measure the harmful impacts that would result from HST along the Caltrain corridor.

Using any of the Altamont Pass options such as along existing power line ROW offer superior choices for minimizing adverse environmental impacts on fewer people. The vibration issue alone would have far less community impacts using any of the Altamont options

Construction impacts on our community will be huge from a noise and vibration standpoint and would necessitate takings of private property and land from our town center area. Details relating to the calculations of these impacts are not presented. Without those details, it is impossible to do a fair comparison between project alternatives. In addition, the discussion and information regarding mitigation measure is less than satisfactory.

The notion of expanding to a 4-track configuration with freight trains running on the outer tracks falls far short in evaluating the environmental impact on the communities and households along the ROW.

59-131

The revised EIR also does not adequately consider other routes from San Jose to San Francisco using existing freeway ROW or along the edge of the Bay lands either using a combination of elevated and tunnel roadways. Certainly, construction impacts would not have the same harmful effect on communities. A straighter rail alignment than the Caltrain corridor could be erected allowing the opportunity to operate at higher speeds from San Jose directly to the San Francisco Airport and connecting with the BART system could be achieved using the Bay land route.

59-132

Road impact analysis fails to take into account the cumulative effect on existing and planned development projects in the region on both sides of the Caltrain ROW. The road impact analysis also does not make it clear whether the cumulative impact of the various proposed road closures has been taken into account. The impact of construction and permanent closing of cross street crossings, especially including cumulative impacts, would create a very significant impact causing traffic to use alternative streets, lengthening trip time and adding to adverse environmental impacts in the region. This would include increased traffic congestion, air quality impacts, and pedestrian and bicycle safety impacts. There would be virtual grid-lock within the region during peak hours while HST caused by the construction or closing of east-west rail crossings. Public safety response times would become unreliable and great harm would result.

59-133

The Authority has not demonstrated that it really cares about the significant impact the HST project will have if it uses the Caltrain corridor and the Pacheco Pass alternative.

The Town of Atherton requests that the Authority understand the depth of the Town's opposition to having the HST using the Caltrain corridor. We feel that a "fair" ridership

59-133

analysis will clearly indicate that the Altamont Pass alternative is the preferred alternative for moving people from the Central Valley to the Bay Area.

Thank you.

Sincerely,

Theresa DellaSanta,
City Manager
Town of Atherton

Response to Submission 59 (Theresa DellaSanta, Town of Atherton, February 23, 2012)

59-128

The Authority acknowledges that the *Town of Atherton* CEQA litigation challenging the Bay Area to Central Valley 2008 Program EIR, and 2010 Revised Program EIR, has been ongoing since 2008. The Authority has prepared the current Partially Revised Final Program EIR to address specific issues identified in 2011 court rulings that resulted from this litigation. The Authority acknowledges the Town of Atherton's opposition to a network alternative that would utilize the Caltrain Corridor.

The comment suggests that second-tier, project-level planning and environmental review work for the San Jose to Merced second-tier project is premature due to the fact that the Program EIR has not been found adequate under CEQA. In 2009, the Town of Atherton and others asked the Superior Court to order the Authority to halt its second-tier, project-level environmental studies for the Bay Area to Central Valley Sections, which include the San Francisco to San Jose and the San Jose to Merced Sections. The court declined to issue such an order. The Authority has continued with second-tier planning and EIR work for these sections, however, no second-tier EIR has been issued to date. As of May 2011, the Authority put on hold its work on the Draft EIR for the San Francisco to San Jose Section.

Based on the current schedule, the Authority anticipates completing this Program EIR process well before it issues any second-tier EIR implementing HST in the Bay Area to Central Valley study area. As described in Chapter 1, the Authority's new decisions based on the Partially Revised Program EIR could require adjustment in second-tier, project-level work that is currently underway.

59-129

The blended system approach has been considered in the Partially Revised Draft/Final Program EIR. Chapter 5 discusses how a blended system approach between San Francisco and San Jose would change the first-tier environmental analysis previously disclosed. The blended system is not a separate alternative for the first-tier project,

however. The blended system approach is an implementation concept for the second-tier project. Please refer to Standard Response 1 for more discussion of the blended system approach and phased implementation.

Standard Response 1 also explains why the Partially Revised Final Program EIR continues to include a four-track alignment along the San Francisco Peninsula, and why this analysis does not constrain the Authority's discretion to focus its second-tier project on a blended system approach. As described in more detail in the Revised 2012 Business Plan, the Authority has embraced the blended system approach for the HST.

The Authority does not concur with the comment that a new ridership model is necessary for the Program EIR analysis and for the Authority Board to determine which network alternative would serve the greatest ridership for the system. Ridership analysis has demonstrated that both Pacheco Pass and Altamont Pass alternatives have high ridership. Ridership has therefore not been treated as a distinguishing characteristic in the selection of the network alternative. Further, the ridership model that was used for forecasts in the Program EIR was the subject of an extensive litigation challenge and the Superior Court concluded the model was supported by substantial evidence.

As indicated in Chapter 6, ridership is one of many factors that have been considered in the staff recommendation of the preferred alternative.

59-130

The environmental impacts of any of the eleven Altamont Pass network alternatives are identified in the 2008 Final Program EIR, as supplemented by the 2010 Revised Final Program EIR and this Partially Revised Final Program EIR. The Authority does not agree with the characterization that any of the Altamont Pass options would have less significant environmental impacts than the Pacheco

Pass options. All the alternatives result in significant environmental impacts, as well as significant benefits. Please see Chapter 6 discussing the rationale for the staff recommendation of a preferred alternative and the tradeoffs involved in the various alternatives.

The Authority acknowledges the comment regarding impacts on the Town of Atherton, including its neighborhoods, and the Town of Atherton's opposition to any change in the Caltrain Corridor. While the comment states that the Town of Atherton would derive no benefits, the Authority notes that the Program EIR describes transportation, safety, and noise reduction from creating of a grade separated rail alignment. The future project-level studies will include a detailed assessment of potential disruption to businesses and communities during project construction, evaluation of construction phasing and staging needs and impacts, and detailed mitigation plans to address impacts of construction on traffic, circulation, and property access. Such detailed assessments can be provided only when additional design and engineering detail is developed for the project-level studies

The Partially Revised Final Program EIR is a first-tier EIR, and impacts are described broadly. Please refer to Standard Response 3 regarding the level of detail for impacts analysis and mitigation.

59-131

The comment suggests that the Partially Revised Draft Program EIR did not adequately consider other alignment alternatives from San Francisco to San Jose, and specifically suggests using existing freeway right-of-way. To the extent that this comment suggests an HST alignment along US 101 or I 280, both alignments have been preliminarily considered and eliminated from detailed study for reasons set forth in Chapter 2 and Appendix 2G of the 2008 Final Program EIR. The US 101 and I 280 alignments have been the subject of the Town of Atherton's litigation challenge. The Superior Court concluded that the Authority's decision to eliminate these options from detailed study was supported by substantial evidence. Please also refer to Standard Response 10, Alternatives, of the 2010 Revised Final Program EIR, for a discussion of alternative alignments on the Peninsula.

59-132

The 2008 Program EIR analyzed reasonably foreseeable projects that are either close to the HST Network Alternatives or of a size/scale that could affect regional resources and that, when combined with the proposed HST Network Alternatives, could contribute to cumulative impacts. The 2008 Program EIR concluded that implementation of the HST project could be a considerable contribution to the cumulative traffic and circulation impact related to surface streets leading to and from proposed HST stations, although the HST project did not represent a considerable contribution to any other cumulative traffic-related impacts. New information and changed conditions since the September 2010 certification of the 2010 Revised Program EIR were analyzed in Chapter 5 of the Partially Revised Draft Program EIR. Nothing about that new information, including any specific development projects reviewed, affects the conclusions in the 2008 Program EIR regarding cumulative impacts.

In the Partially Revised Program EIR, the closure of parallel lanes has been addressed on an individual location basis. For example, the closure of one lane of Pacific Avenue in San Mateo and the localized re-direction of traffic in the immediate area would have no cumulative effect on the closure of one direction of travel on Alma Avenue in Menlo Park. However, two potential lane closures, Old County Road and Stafford Street in San Carlos and Redwood City and a long stretch of Alma Avenue in Palo Alto were each analyzed for the lane closure for the complete length of the corridor to fully identify any significant impacts.

As explained in Chapter 5, the HST track alignment must be grade separated from perpendicular roads, and in some instances roads may be raised, lowered, or even closed to accomplish the grade separation. Implementation of grade separation and the associated effect on traffic is addressed as part of the traffic modeling in the program-level analysis but will be more comprehensively evaluated in the project-level environmental document. There has not been an analysis of the construction impacts of converting existing at-grade crossings of the railroad corridor to full grade separation. No decisions will be made about the design of grade separations as part

of the first-tier, programmatic decision. The design of grade separations will take place as part of second-tier project planning and environmental analysis. At this time sufficient level of detail has not been developed to determine the construction impacts for crossings of the existing trackway. The design of grade separations will take place as part of second-tier project planning and environmental analysis, and construction impacts will be evaluated in the project-level environmental document. That document will identify a construction staging plan that allows the project to be constructed in a reasonable time period, while at the same time minimizing the effect on traffic circulation and impacts on traffic. That document will also address permanent crossing closures, if any, and determine the effect on traffic congestion, emergency response times, or other access and circulation issues.

59-133

The Authority is very sensitive to the adverse effects the construction and operation of the HST system on the Caltrain Corridor would have on Atherton and other communities along the alignment. The HST also offers project benefits, however, the Authority is aware of and respects that Atherton does not agree.

The comment suggests a fair ridership analysis would show that the Altamont Pass is superior for moving people from the Bay Area to the Central Valley. The Authority notes that the purpose of the HST system 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. The purpose encompasses the north/south connection of the Bay Area and Los Angeles Basin, not just the connection between the Bay Area and Central Valley. Ridership analysis has indicated that the Altamont Pass network alternatives were superior in terms of their ridership connecting the Bay Area to the Sacramento area and northern San Joaquin Valley, whereas the Pacheco Pass network alternatives were superior in terms of Bay Area/Los Angeles ridership.

Submission 67 (Hans F. Larsen, City of San Jose, Department of Transportation, February 22, 2012)



3980
02-24-12501-27 REV D
Department of Transportation
HANS F. LARSEN, DIRECTOR

67-497

February 21, 2012

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

Subject: Bay Area to Central Valley Revised Draft Program-Level EIR

Dear Mr. Albright,

67-497

The City of San José appreciates the efforts of the California High Speed Rail Authority to include the perspectives of all local agencies as part of the development of the San José to San Francisco segment of the California High Speed Rail project. As a long time supporter of this project, the City of San José strongly supports the findings in the Revised Draft Program Environmental Impact Report (EIR) for the Bay Area to Central Valley segment and considers the implementation of High Speed Rail in the Caltrain Peninsula Corridor vital to the long term interests of the entire region. Further, the revised analysis remains consistent with San José's adopted goals toward implementing multi-modal, transit oriented facilities along transit corridors throughout the City.

In our view the Revised Draft Program EIR has addressed Judge Kenny's ruling that the original and initially revised EIR did not adequately describe the alignment between Gilroy and San José. The City of San José is well 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 and, in fact, has adopted a comprehensive update to the City's General Plan referred to as Envision San Jose 2040. This effort was completed by a 36-member task force of elected officials and community leaders. The General Plan update adopted a list of proposed changes to San Jose's roadway network. Among the proposed changes unanimously endorsed by the City Council 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.

It is important to note that portions of Monterey Highway in San José have historically been part of State Highway 82 under the jurisdiction of the State Department of Transportation (Caltrans) and the City of San José has operated and maintained the facility as part of a maintenance agreement with the department. However, on December 28, 2011, the City and Caltrans entered into an agreement relinquishing Monterey

Mr. Greg Albright
Subject: Bay Area to Central Valley Revised Draft Program-Level EIR
February 21, 2012
Page 2 of 2

Highway from Caltrans to San José in an effort to further facilitate any possible corridor modifications in order to accommodate future private development in the area as well as the ongoing development of the HST project.

While the implementation of the California High Speed Rail project within the existing railway corridor of the Caltrain Commuter Rail System presents significant challenges, we continue to believe that solutions to these challenges can be identified as part of the Project Level Environmental Review process currently under way.

The City of San José remains 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,


Hans F. Larsen, Director
Department of Transportation

Response to Submission 67 (Hans F. Larsen, City of San Jose, Department of Transportation, March 5, 2012)

67-497

Comment of support acknowledged.

Submission 70 (J. Edward Tewes, City of Morgan Hill, February 23, 2012)



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02-07-12 10:43 AM REV'D

CITY MANAGER'S OFFICE
17551 PEAR AVENUE
MORGAN HILL, CA 95037-4128
TEL: 408-779-7277
FAX: 408-779-1594
WWW.MORGAN-HILL.CA.GOV

70-476

February 22, 2012

Mr. John Mason
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Bay Area to Central Valley High Speed Train Partially Revised Draft Program Environmental Impact Report

Dear Mr. Mason:

Thank you for the opportunity to comment on the Partially Revised Draft Program Environmental Impact Report for the Bay Area to Central Valley Section of the California High Speed Train (HST) Network. As reported in the Revised Program EIR, the east of Union Pacific Railroad (UPRR) alignment in Morgan Hill will require relocation of Monterey Road 50 to 60 feet to the east. The road realignment will impact properties on the east side of Monterey in the Madrone Area of our community and may require removal or relocation of buildings.

70-474

The shift of Monterey Road to the east creates noise and vibration impacts by moving the road closer to sensitive receptors. The noise and vibration impact from the project overall has been previously described as significant under CEQA for the alignment that includes Monterey Road. The conclusion in the Partially Revised Draft Program EIR remains the same. For clarity, the shift of Monterey Road has been identified as a separate significant noise impact and mitigation strategies specific to Monterey Road are described in the Partially Revised Draft Program EIR. Mitigation will include installation and or replacement of sound walls along property lines where appropriate. Noise impacts will need to be more fully articulated and addressed in the second tier Project Environmental Impact Report.

70-475

The Rail Authority proposes to close the Tilton Avenue at-grade crossing west of the UPRR tracks and construct a new grade separated crossing over the railroad tracks from Monterey Road to a new road south of Tilton Avenue that would connect to Hale Avenue/Santa Teresa. Additional grade separations may be proposed for East Main, East Dunne, San Pedro and Tennant Avenues. The Grade separation and road closures will need to be evaluated for consistency with local circulation plans and potential impacts to the City's road network.

70-476

The City of Morgan Hill is previously on record in support of the Pacheco Pass through Gilroy and Morgan Hill to San Jose as the preferred network alignment for HST service from the Central Valley.

The Morgan Hill City Council, at their February 15, 2012 meeting voted to support of the Rail Authority staff recommendation to readopt the Pacheco Pass alignment as the preferred alignment for further study in the project level EIR/EIS.

Thank you again for the opportunity to comment on the Bay Area to Central Valley Partially Revised Draft Program EIR. If you have any questions, please contact me at 408/782-9154.

Sincerely,

J. Edward Tewes
City Manager

Cc Morgan Hill City Council Members
Mr. Gary Kennerley
Mayor Al Pinheiro, City of Gilroy
Thomas J. Haglund, Gilroy City Administrator

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Response to Submission 70 (J. Edward Tewes, City of Morgan Hill, February 28, 2012)

70-474

The comment accurately summarizes the analysis in Chapter 2 of the Partially Revised Draft Program EIR. Noise impacts and mitigation analysis due to the shifting of Monterey Highway will be more fully assessed and articulated at the project level.

70-475

As explained in Chapter 5, the HST track alignment must be grade separated from perpendicular roads, and in some instances roads may be raised, lowered, or even closed to accomplish the grade separation. No decisions will be made about the design of grade separations or the location of road closures as part of the first-tier, programmatic decision. The design of grade separations will take place as part of second-tier project planning and environmental analysis. The grade separations/road closures identified in the comment will be the subject of more specific planning and design if an alignment through Morgan Hill is selected by the Authority Board at the conclusion of this program EIR process.

70-476

The Authority appreciates the City of Morgan Hill's continued support for the HST project and the Pacheco Pass alignment via Gilroy, Morgan Hill, and San Jose.

15 Response to Comments from Businesses/ Organizations

Submission 3 (James Doughty II, Doughty Enterprises, January 6, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #3 DETAIL

Status : Pending
Record Date : 1/6/2012
Response Requested : Yes
Stakeholder Type : Business
Submission Date : 1/6/2012
Submission Method : Website
First Name : James
Last Name : Doughty II
Professional Title : office Manager
Business/Organization : Doughty Enterprises
Address :
Apt./Suite No. :
City : Fresno
State : CA
Zip Code : 93727
Telephone : 559.321-1289
Email : parcoopro@yahoo.com
Cell Phone :
Email Subscription : All Sections, Statewide Planning Only, Fresno - Bakersfield, Merced - Fresno, Sacramento - Merced, Business/Vendor Opportunities
Add to Mailing List : Yes
Stakeholder Comments/Issues : 1.What is the social cost of carbon for construction and how many years before the added benefit equals the cost if the train's average capacity is half full? 2.When, how, and where will the high speed rail system add new branches if the train is more successful than anticipated? 3. What percentage of capacity does the train need to achieve to be able to pay all costs needed to operate, or "break even"?
EIR Comment : Yes

3-77

Response to Submission 3 (James Doughty II, Doughty Enterprises, February 22, 2012)

3-77

In Question 1, it is not clear what is meant by “the social cost of carbon for construction” or what “added benefit” is meant.

The impact and benefit analyses are based on operations that meet peak demand with full trains at peak points on a line, but that result in average loads (measured as passenger miles divided by seat miles) of around 50%. This is a normal feature of linear operations and the result of unevenly distributed demand in time and space.

Peak period pricing, and geographical differences in prices can help even out such peaks and increase the load factor, and in the business planning work underway average loads have been raised to the mid 60% levels. Since the Partially Revised Draft Program EIR already assumes the average loads in the question in performing its analyses, there is no change in the analysis from being half full. With respect to Question 2, the addition of branches of service beyond the full system analyzed in the Partially Revised Draft Program EIR is not envisaged in the time frame of the analysis. If other branches were to be proposed in the future they would undergo separate environmental review at that time.

With respect to Question 3, the operational break-even point depends on the context of the analysis, and the assumptions made about fares. The simplest case is the addition of a train run to an existing service, in which the added costs are primarily those of operating and maintaining the train. Based on the 2012 Draft Business Plan, this cost is on the order of \$25 to \$30 per trainset mile without any allocation of the relatively fixed cost of insurance, station staffing, administration, or maintenance of infrastructure. With fares on the order of 20 cents per mile as in the draft Business Plan, the incremental break-even point would be reached with an average of 125–150 passengers on board. In a trainset of 400–500 seats, this would mean a load of 25–38%. With lower or higher fares, the break-even point would vary correspondingly.

At the other end of the spectrum, the break-even point of the entire operation is not particularly a function of the average load on the train, since the operator can reduce or add service to maintain load

factors in the 50-70% range. In this case, the break-even point is determined by the volume of traffic required to cover the relatively fixed costs mentioned above. In the 2012 Draft Business Plan, Exhibit 8-16 shows that the break-even point for an initial operating segment is 17% of the forecast high ridership, once the service has grown to its long term potential.

Submission 14 (Evan Jones, Whoa Nellie Foundation, January 10, 2012)

3573
07-10-12P03:33 RCVD


John Mason,
California High-Speed Rail Authority,
770 L Street, Suite 800, Sacramento, CA 95814.

14-17

Arguing that the state's growing population warrants high-speed rail ignores another option. At a tiny fraction of the cost of HSR, an investment in family-planning services would dramatically reduce the growth of California's population, reduce unplanned pregnancies(now at over 40% of births), reduce the need for infrastructure, save billions in social costs of unwanted children, and reduce greenhouse gases and consumption of resources. A reduction of unwanted births of only 50,000 a year(0.2% of the population per year) would lower CO2 emissions more than the total emissions reduction of HSR.

Build, build, build is unsustainable. Let's break the vicious cycle now.

Also, the projected (optimistic) revenue of \$4 billion would not even cover the debt-service cost for this boondoggle.

Regards,

Evan Jones, Director,
Whoa Nellie Foundation
520 P Street #33
Sacramento, CA 95814

Response to Submission 14 (Evan Jones, Whoa Nellie Foundation, January 27, 2012)

14-17

CEQA requires that an EIR study alternatives to the proposed project, or to the location of the proposed project, which are capable of reducing environmental impacts and still accomplish most project objectives. The alternative suggested in this comment would not accomplish any of the project objectives. Refer to Chapter 2 of the 2008 Final Program EIR.

Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012)

MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW 1690 WEST SHAW AVENUE SUITE 200 FRESNO, CALIFORNIA 93711 POST OFFICE BOX 9099 FRESNO, CALIFORNIA 93730-9099

C. CARL MOTSCHIEDLER, ESQ. MICHAELIDES, WISHON, BREWER & RYAN, LLP C. WILLIAM BREWER, RUSSELL K. RYAN, JORDAN M. FREEMAN, JUSTIN D. HARRIS

A PROFESSIONAL CORPORATION ALSO ADMITTED IN UTAH

MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 2 of 9

United Park, Inc., a retail commercial center, truck stop and fueling station, on the Property.

Our Clients oppose Route A2-UPRR/Avenue 24 (Henry Miller) alignment(s) but support A1-BNSF/Route south of SR 152 alignment(s), the latter having been proposed by the major cities in Madera County.

A preferred alternative that would better serve both public and private interests is the A1-BNSF/Avenue 21 alignment for the Hybrid track. The resolutions of the cities of Chowchilla and Madera, which also oppose Route A2-UPRR/Avenue 24 (Henry Miller), are consistent with our preferred alternative.

Background: The Program EIR/EIS certified in 2005 by CAHSRA and the Federal Railroad Administration ("FRA") evaluated alternative routes in the Central Valley and was followed by a subsequent Program EIR/EIS in 2008.

The A1-BNSF/Avenue 21 Alternative Should be the Preferred Alignment.

CAHSRA Board Resolution 05-01 (November 2, 2005), which certified the Program EIR for the High-Speed Train System, clearly selected the BNSF (A1) alignment in Madera County as the preferred alignment.

Throughout the corridor the UP alignment passes through more urban areas and would require more aerial structures, thereby increasing

January 19, 2012

01-23-12P12:14 RCVD

16-485

VIA CERTIFIED MAIL - RETURN RECEIPT

John Mason California High Speed Rail Authority 770 L Street, Suite 800 Sacramento, CA 95814 Ph. 916-324-1541

Re: Comments to Partially Revised Draft Program EIR/EIS (Bay Area to Central Valley High-Speed Train); Opposition to A2-UPRR / Avenue 24 (Henry Miller) alignment(s); and Preferred Alternatives and Suggestions

Dear Mr. Mason,

Our firm represents Bay Valley Venture, LLC, Delta Valley Venture, LLC and United Park, Inc. (collectively, "Clients"), commercial property and business owners within the State Route 99 corridor in Chowchilla, Madera County, whose property and commercial enterprises are severely and adversely impacted by the recent changes to the A2-UPRR/Avenue 24 High Speed Rail alignment(s).

The subject commercial properties are situated at the southwest corner of Highway 99 and Avenue 24 in the City of Chowchilla, County of Madera ("Chowchilla"). Specifically included are the following assessor parcels: 027-053-008, 027-053-009, 027-053-010 and 027-053-011 (collectively, the "Property").

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Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 3 of 9

16-485

adverse impacts to communities and construction costs. Both the UP and BNSF have freight activity; however, the UP serves more local industries adjacent to the corridor that the HSR alignment would have to avoid. The HSR would typically accomplish this by using aerial structures to fly over the local freight tracks, which would add cost and cause additional adverse community impacts. The BNSF alignment traverses a more rural setting, would require fewer aerial structures and would cause fewer impacts to Central Valley communities."

"A great advantage of the BNSF alignment is that much of the HSR system could be constructed at-grade such that the freight track would be grade separated along with the adjacent HSR tracks. This would benefit freight services and communities by reducing noise (due to the elimination of horn noise and gate noise from existing services), providing improved safety, freeing automobile traffic and improving air quality through reduced congestion." (2005 Program EIR Ch. 6a pg. 6A-10)

16-486

CAHSRA's expressed reluctance to consider project alternatives proposed by responsible agencies and adversely impacted businesses, residents and land owners¹ is in itself a violation of CEQA and NEPA [CEQA Guidelines § 15126.6(a); Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal. 3d 553, 566].

For the HST project ("Project"), CEQA required the EIR to include analysis of "alterative locations" especially where, as here, responsible agencies, the public, landowners, residents and business owners have demonstrated alternative locations that would avoid or substantially lessen significant effects on the Project [CEQA Guidelines, § 15126.6(f)(2)]. Examples of such alternative locations meeting the above criteria are the Madera County, City of Madera and City of Chowchilla alternatives (see as per their passed resolutions, attached hereto), and the similar Bay Valley Venture and Delta Valley Venture alternatives for locating the Chowchilla area curve on the south side of SR 152 and/or Avenue 21.

NEPA also requires the consideration of alternatives – and with stronger force. A number of NEPA cases have emphasized the importance of the consideration of alternatives. For example, in Monroe County Conservation Council, Inc. v. Volpe (2d Cir. 1972) 472 F. 2d 693, 697-698, the Second Circuit Court of Appeals described the requirement to analyze alternatives as the "linchpin" of the environmental impact

¹ See CAHSRA Executive Summary Progress Report dated June 2010, page 6.

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MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 4 of 9

16-486

statement. The Council on Environmental Quality ("CEQA"), which promulgates regulations implementing NEPA, describes the alternatives requirement as the "heart" of an EIS (40 C.F.R. § 1502.14).

16-487

The Draft EIR/EIS is also deficient by reason of its deferral of mitigation measures into the uncertain future, without the CEQA-required articulation of specific performance criteria. The Partially Revised Draft Program EIR/EIS's inadequacy is also evident with regard to mitigation measures by the failure to make commencement of construction of the Project contingent on finding a way to meet the mitigation. The Partially Revised Draft Program EIR/EIS sections where this deficiency is evident includes the Noise and Vibration; Aesthetics and Visual Resources; and Socioeconomics, Communities and Environmental Justice sections [Endangered Habitats League, Inc. v. State Water Resources Control Board (1997) 63 Cal. App. 4th 777].

16-488

The Partially Revised Draft Program EIR/EIS is deficient in its cursory treatment of HST impact on land use and development, errantly concluding it is "less than significant." In light of the abundance of responsible agency comments to the contrary, substantial evidence exists supporting a fair argument that the HST Project may have a significant impact on land use. Therefore, it must be fully analyzed in the Partially Revised Draft Program EIR/EIS as to each local agency impacted, including without limitation, growth-inducing impacts [No Oil, Inc. v. City of Los Angeles (1974) 13 Cal. 3d 68, 75. Public Resources Code § 21100(b)(5). CEQA Guidelines §§ 15126(d), 15126.2(d)]. This would apply to every local agency having land use planning authority, including cities and counties. Such land use authority is derived from the State Planning Act (Gov't Code § 65000 et seq.) and/or its charter.

16-489

The Partially Revised Draft Program EIR/EIS is deficient in its analysis of Air Quality impacts by its failure to recognize the Project's impacts in Madera County, Cities of Madera and Chowchilla, resulting in increased vehicle miles traveled ("VMT"). HST passengers from these jurisdictions would necessarily travel to the Merced or Fresno HST stations, thus increasing VMT. That such a fair argument can be made and supported by substantial evidence that the Project may have a significant impact on the environment by reason of the increase in VMT is certain.

The Project is subject to the Federal Clean Air Act § 309 (42 U.S.C. § 7609) and NEPA [40 CFR § 1503.1(a)] which authorize the EPA to comment on the impacts of any matter that is subject to NEPA. The California Air Resources Board is similarly vested with authority under State law (Pub. Res. Code § 2100 et seq. and Health & Safety Code §§ 38500, 38599). By its use of unsupported conclusory statements and assumptions

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Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 5 of 9

MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 6 of 9

16-489 concerning air quality, CAHSRA has imposed an effective blockade to meaningful comment from the EPA, CARB and the public.

The intersection of two HST routes that is unique to Chowchilla and Madera County results in disproportional impacts on phased air quality, traffic, aesthetics, planned growth locally and regionally and land use planning and development. The cumulative impacts of all these unique-to-Madera County and Chowchilla issues must also be separately addressed. Absent these additional matters being given proper attention, study and analysis in the Partially Revised Draft Program EIR/EIS, it is inadequate under CEQA and NEPA as well as the Clean Air Act.

16-490 A focused analysis of the economic social impact must be made by reason of the HSR Project's division of our Clients' Property and the City of Chowchilla, an existing community. Under alternative alignment A2-UPRR/Avenue 24 (Henry Miller), Chowchilla is split. CEQA Guidelines § 15131(b) requires this analysis, which would appear to be absent from the Partially Revised Draft Program EIR/EIS. This analysis necessarily must also address traffic and air pollution impacts resulting from these divisions.

16-491 CAHSRA's bait-and-switch change to an off-alignment "jog" to the West at SR 99 at/near Avenue 24 in Chowchilla, Madera County, creates more significant adverse environmental impacts that the preceding design. And it violates one of the foundational requirements of Proposition 1A that the HST be located in existing travel corridors.

This jog also uniquely and unjustly destroys both the land and the business goodwill of Bay Valley and Delta Valley Ventures currently operating on adjoined parcels described above comprising 50 +/- acres. Access to the Subject Property would be substantially if not totally impaired by this "jog" that was inserted without notice or explanation as a change to the previously circulated Program EIR.

Resulting exacerbating adverse environmental impacts would be road closures, increased traffic congestion, impaired air quality in a sensitive air basin, noise, urban blight, economic loss and disruptions of established land use planning.

Economic loss, loss of jobs, urban blight and degrading social change must be addressed and analyzed in the Partially Revised Draft Program EIR/EIS as they are related to, and caused by, the physical changes which are significant impacts. CEQA and NEPA require this analysis (CEQA Guidelines, § 15382).

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16-492 The Partially Revised Draft Program EIR/EIS Analysis of Public Utilities and Energy is Misleading and Based on Speculation.

The speculation is that "[a]lthough the HST System would result in an increase in electricity demand, it would reduce the energy demands from automobile and airplane travel, resulting in an overall beneficial effect on statewide energy use." (Partially Revised Draft Program EIR/EIS § 3.6.5.1, p. 3.6-27)

Speculation is not substantial evidence (CEQA Guidelines § 15384). The speculative statement above is utterly without evidentiary support, yet purports to justify the very foundation of CAHSRA's premise that the HST Project would result in a net decrease in statewide energy use. The assumption that airplane travel will decrease so as to consume less energy with the Project than in the before condition is pure speculation. In like manner, the assumption that automobile travel in and through and out of California would decrease because of the HST Project is nothing by speculation.

Thus, there is but superficial analysis that "assures" the public use of a dual base-line approach in the Partially Revised Draft Program EIR/EIS section on Public Utilities and Energy. Compliance with controlling CEQA authority is questionable at best (see Woodward Park Homeowners' Assn. v. City of Fresno (2007) 150 Cal. App. 4th 683, 707 and Sunnyvale West Neighborhood Assn. v. City of Sunnyvale (2010), 190 Cal. App. 4th 1351).

16-493 The CAHSR Partially Revised Draft Program EIR/EIS is also deficient for its failure to address the large PG&E gas line and gas line easements notwithstanding the intersecting of HST alternatives therewith. In light of the recent tragic explosions and fires in San Bruno, which had significant adverse impacts on the population and the environment, the Partially Revised Draft Program EIR/EIS should address this issue, especially with respect to construction and location alternatives for the HST.

In light of this recent history and the more recent disclosure of PG&E's sloppy monitoring and record keeping of such pipelines, some of the possible environmental impacts may include the following: (a) pollution in violation of the Federal Clean Water Act (33 U.S.C. §§ 1251-1387) and California's Porter-Colegoc Water Quality Control Act (Water Code §§ 13000-149500); (b) air pollution, in violation of the Clean Air Act (42 U.S.C. §§ 7401-7671q) and Health & Safety Code §§ 39000-44474; (c) hazardous waste in violation of the Federal Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §§ 6901-6992k) and California's Hazardous Water Control Act (Health & Safety Code §§ 25100-25250.28); and (d) clean up of environmental contamination as required

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Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 7 of 9

16-493

by the Carpenter-Presley-Tanner Hazardous Substances Account Act (California Superfund) (Health & Safety Code §§ 25300-25395.45).

16-494

For the reasons stated above, together with numerous adverse environmental impacts which we and many others are addressing, and in light of the unique and disproportional impacts on our Clients' Property, our Clients would like to propose the attached map depicting an alternative east-west and north-south alignment that should be analyzed by your staff, considered by the CAHSRA Board and included in the Final Environmental Impact Report.

An east-west alignment using the existing right of way of Highway 152 or Avenue 21 would provide the best benefit to the State of California, the residents of Madera County, as well as the ultimate operators and passengers of the HST. Highway 152 is one of the most dangerous Highways in the State. If the CAHSRA Board were to adopt the Highway 152 or Avenue 21 alternative it would allow for construction of additional overpasses to permit safer travel by the public, including school buses. An alignment along Highway 152 or Avenue 21 would also limit commercial strip development and other associated growth inducing impacts that may be involved. To the contrary, the A2-UPRR/Avenue 24 (Henry Miller) alignment would result in significant growth-reducing impacts, which would not have been adequately addressed. The Partially Revised Draft Program EIR/EIS is deficient in this regard, in violation of CEQA [Pub. Res. Code § 21100(b)(5) and Guidelines § 15126(d). See Napa Citizens for Honest Government v. Napa County Board of Supervisors (2001) 91 Cal. App. 4th 342, 368].

The design of CAHSRA's A2-UPRR/Avenue 24 (Henry Miller) and its Hybrid Avenue 24 arc, on their face, counter-productive to the stated goals of the IIST project, including the primary goal of train speed of 220 mph. Referring to the attached drawing depicting curves "A" and "C" and segment "B", at curve "A", on west side of Chowchilla, the HST Hybrid route speed will be only 150 mph. However, the 220 mph target speed could easily be maintained by choosing curve "C" which we propose here. The proposed curve "C" alignment will provide a wider radius turn to maintain the target train speed at or near 220 mph to meet the programmed travel time from San Francisco to Los Angeles and vice versa.

The segment labeled "B" on the attached drawing is currently located on the north side of the State Highway 152 or north side of Avenue 21 and is in direct conflict with the City of Chowchilla's Resolution No. 27-10 passed unanimously by its City Council on April 26, 2010, copy attached. Therefore, choosing curve "C" and staying on the

[0402010002\1243440.DOC]

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MOTSCHIEDLER, MICHAELIDES, WISHON, BREWER & RYAN, LLP ATTORNEYS AT LAW

John Mason January 19, 2012 Page 8 of 9

16-494

south side of state Highway 152 or south side of Avenue 21 would avoid the conflict with Chowchilla's resolution opposing A2-UPRR. That resolution provides additional substantial evidence based on the avoidance or mitigation of significant environmental impacts supporting its objection to A2-UPRR/Avenue 24 alignment. Adopting alternative proposed curve "C" would also garner the support of both the cities of Chowchilla and Madera, as well as the County of Madera.

In general, we are supportive of the A1 alignment along BNSF. However, at Avenue 24, for reasons CAHSRA has been unable or unwilling to explain, rather than continuing to follow Highway 99, the alignment cuts over through a number of planned or existing industrial and commercial developments, and into the heart of Chowchilla. We would propose staying adjacent to and south of Highway 152 or Avenue 21 and on the east side of Highway 99 on the A1-BNSF alignment throughout Madera County, thereby lessening the adverse impacts to our Clients' development, Chowchilla's planned industrial property, and the commercial core of Chowchilla. We respectfully request and strongly urge CAHSRA to consider the attached proposed alternative Curve "C" alignment, in addition to the A1/BNSF alignment, and include them in all current and future environmental documents moving forward. In sum, we strongly urge CAHSRA to reconsider its current alignments through Madera County and cities of Madera and Chowchilla.

16-495

Our Clients respectfully join in and support the concerns and comments of the Madera County Resource Management Agency and the Cities of Chowchilla and Madera with respect to Noise and Vibration, Aesthetics, Economic and Social Effects, Land Use Planning, Local and Regional growth, Air Quality and Global Climate Change, Agriculture (including transportation, inaccurate traffic counts, Williamson Act land, conversion of Prime Ag. Land, etc.), Safety and Security, Water Resources, and Transportation.

In Madera County, locating the HST route on the west side of Chowchilla on Curve "C" would most certainly help CAHSRA achieve its goals in the following ways:

- Avoid stated conflicts in and around Clients' development, the City of Chowchilla, City of Madera and County of Madera, California;
• Meet the target speed and travel time between San Francisco and Los Angeles;
• Avoid or mitigate significant adverse environmental impacts; and

[0402010002\1243440.DOC]

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Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

MOTSCHIEDLER, MICHAELIDES, WISHON,
BREWER & RYAN, LLP
ATTORNEYS AT LAW

John Mason
January 19, 2012
Page 9 of 9

16-495

- Significantly reduce right-of-way acquisition costs, including the payment of just compensation, severance damages and loss of business goodwill.

We respectfully request CAHSRA to take appropriate steps to gain the support of the residents and agencies of Madera County, California. Thank you for your consideration of our comments and recommendations.

Very truly yours,

MOTSCHIEDLER, MICHAELIDES,
WISHON, BREWER & RYAN, LLP



C. William Brewer, P.C., Attorneys for Bay
Valley Venture, LLC, Delta Valley Venture,
LLC and United Park, Inc.

CWB:jsh

Enclosures: Resolutions, Letters **Opposing** A2-UPRR/Avenue 24 (Henry Miller) alignment(s) recently proposed by HSR Authority, and Drawing on Map depicting Avenue 21 alternative Curve "C":

- 1-City of Madera Resolution No. 10-110
- 2-Madera Chamber of Commerce Letter of May 13, 2010
- 3-City of Chowchilla Resolution No. 27-10
- 4-Chowchilla Chamber of Commerce Resolution No. 01-2010
- 5-Madera County Economic Development Commission Letter of April 30, 2010
- 6-Greater Madera County Industrial Association Letter of May 18, 2010
- 7-Drawing depicting alternative "C" hybrid route in Madera County.

cc: Bay Valley Ventures, LLC
Delta Valley Venture, LLC
United Park, Inc.

{04020\0002\1243440.DOC}

9

Attachment to Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012)

RESOLUTION NO. 16-110

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, SUPPORTING THE A-1 CALIFORNIA HIGH SPEED RAIL ALIGNMENT AND OPPOSING THE SELECTION OF THE A-2 ALIGNMENT

WHEREAS, California's high-speed rail project (HSR Project) is a planned transportation backbone whose initial 500 miles (phase one) will begin in Anaheim/Los Angeles, run through the Central Valley from Bakersfield to Merced, then head northwest into the Bay Area. It will travel up to 220 miles per hour and be able to make its journey from Los Angeles to San Francisco in under 2 hours and 40 minutes; and

WHEREAS, the Merced to Fresno portion of system is one of several sections that are being evaluated and studied environmentally as distinct segments. The Merced to Fresno section of the High-Speed Rail (HSR) system is 60 miles long and includes the junction that permits high-speed trains to be routed either to Sacramento or San Francisco in the north. HSR stations are proposed in downtown Merced and Fresno and a heavy maintenance and repair facility will be evaluated in the Merced to Fresno HSR project area; and

WHEREAS, of three potential alignments in the vicinity of Madera, two routes remain under consideration: A-1 (Burlington Northern Santa Fe Corridor) and A-2 (Union Pacific Corridor); and

WHEREAS, the HSR Project staff has determined that the A-1 alignment "is a viable alternative that meets the project purpose and need while also adhering to all the project objectives;" and

WHEREAS, the A-1 route represents the best opportunity to collaborate with adjacent rail corridor (BNSF), and is less expensive to construct than A-2; and

WHEREAS, the A-1 alignment in large measure will avoid the impacts created by the A-2 alignment. The A-1 alignment circumvents the City hence avoiding impacts to the downtown, businesses outside of the downtown, and properties with significant development potential outside of the downtown area; and

WHEREAS, damage to sites with potential for retail development -- at Avenue 17 and 89 as well as Avenue 12 and 89 -- will be avoided by the A-2 alignment. Sales tax is a major revenue source for the City's General Fund. Loss of sales tax would result in a loss of service dollars available to fund police, fire, streets, etc; and

WHEREAS, businesses forced to relocate from downtown Madera will likely have difficulty finding buildings with comparable rent structures, in close proximity -- walking distance -- to their customers; and

WHEREAS, unless the A-1 alignment is selected, the physical setting and scale of the rail structure associated with the elevated A-2 alignment will be inconsistent with the setting and scale of downtown Madera; and

WHEREAS, the State Auditor's recent report on the HSR business describes a seriously flawed plan, casting doubt on the timing and success of the project in its current form, and is a compelling argument that expectations of large amounts of capital mitigation funds for Madera are extremely speculative; and

WHEREAS, there are 21 locations currently competing for designation as the heavy maintenance facility, including 5 sites in Madera County. One of the Madera County sites relies on the A-1 alignment, and two additional sites would work on either route. If the preferred heavy maintenance facility site is located on the A-1 alignment exclusively, the selection of an alignment other than A-1 could cost Madera County thousands of jobs and multiple millions of dollars in investments.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds, orders and resolves as follows:

1. The above recitals are true and correct.
2. The City Council hereby identifies and supports the A-1 alignment for the HSR Project through the Madera General Plan Planning Area.
3. The City Council hereby opposes the selection of the A-2 alignment for the HSR Project through the Madera General Plan Planning Area.
4. This resolution is effective immediately.

Attachment to Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

Res. 10-110

PASSED AND ADOPTED by the City Council of the City of Madera this 19th day of May, 2010

by the following vote:

- AYES: Council Members Svanda, Poythress, Mindt, Bomprezzi, Ammentrout.
- NOES: None.
- ABSTENTIONS: None.
- ABSENT: None.



GARY L. SVANDA, Mayor

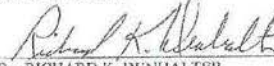
ATTEST:



SONIA ALVAREZ, City Clerk



APPROVED AS TO LEGAL FORM:
CITY ATTORNEY



By: RICHARD K. DENHALTER
5/24/10

MADERA
CHAMBER OF
COMMERCE

120 North E Street
Madera, CA 93638
Phone (559) 673-3563
FAX (559) 673-5009
www.maderachamber.com

May 13, 2010

Mr. Curt Pringle, Chairman
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

Dear Chairman Pringle:

On April 28, 2010, the Madera Chamber of Commerce Board of Directors took official action on the proposed California High Speed Rail routes through Madera. A motion was unanimously passed opposing the A-2 route that runs through the City of Madera and supporting the A-1 route, or a version with minor modifications of the A-1 route, just east of the city.

In opposition to the A-2 route, the Madera Chamber of Commerce Board of Directors have concluded that there are far too many impacts that would devastate the residential, commercial, and industrial areas along the proposed A-2 route.

Too many commercial and industrial businesses would be displaced, and while there are funds to assist in the relocation of those affected by the proposed route, there is a concern that this would not be feasible or affordable for these businesses to do so, thus creating a great hardship. In particular, our downtown businesses provide services to those who live in the area and that have limited transportation. The end result of the high speed rail on the proposed A-2 route would eliminate these services and products to those consumers, creating a loss of client base for the downtown commercial area. The aforementioned arguments also create a concern for the loss of sales tax revenue to our city.

The Madera Chamber of Commerce questions whether the funding from mitigation would really provide what is needed to successfully resolve the negative impacts this route would leave in its trail.

With the great task ahead of you, the Madera Chamber of Commerce Board of Directors, respectfully requests that you eliminate the proposed A-2 route and focus all future developments for the A-1 route regarding the high speed rail in Madera County.

If you, or your staff, have any questions or need additional information, please feel free to contact me at (559) 673-3563.

Respectfully,



Debra L. Bray
President/CEO
Madera Chamber of Commerce

Attachment to Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

RESOLUTION NO. 27-19

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHOWCHILLA SUPPORTING THE HIGH SPEED RAIL AUTHORITY ALIGNMENT DESIGNATED AS "A1"

WHEREAS, the board of the state of California have approved funding of a high speed rail system designed to travel from Los Angeles to Sacramento to San Francisco and to points in between.

WHEREAS, the High Speed Rail Authority has selected two potential north/south routes designated as "A1" near or along the existing BNSF right of way, and "A2" near or along the UPRR right of way.

WHEREAS, The City of Chowchilla Supports the High Speed Rail System in California as a vital component to the future of the San Joaquin Valley and the entire State of California.

WHEREAS, the City of Chowchilla has actively participated in attempting to identify alternate rail routes that would minimize the impact on cities and agriculture.

WHEREAS, the placement of the east/west connection along the Hwy 99 corridor has the potential for significant negative impacts for the City of Chowchilla.

NOW, THEREFORE, LET IT BE RESOLVED that the City Council of the City of Chowchilla hereby resolves, finds and orders as follows:

- 1. The above recitals are true and correct.
2. The City of Chowchilla supports High Speed Rail Alignment along the Santa Fe Railroad Corridor, designated as "A1" by the High Speed Rail Authority.
3. This Alignment follows an established transportation corridor and mitigates any negative effects on the City of Chowchilla.
4. The City of Chowchilla does not support the High Speed Rail Alignment along the Union Pacific Railroad, designated as "A2" by the High Speed Rail Authority. This alignment creates short and long term negative effects on the City of Chowchilla, its retail and commercial corridors, and is not consistent with its General Plan.
5. The City of Chowchilla supports the East/West Alignment of the High Speed Rail to be placed on Avenue 21 as it enters Madera County from the west. The City further supports the East/West to North/South "Y" connection to be placed at the intersection of Avenue 21 and the Santa Fe Railroad (A1). This alignment and connection has been proposed to the High Speed Rail Staff. This connection and alignment minimizes the negative effects on farm land and the Cities of Chowchilla and Madera.

PASSED AND ADOPTED by the City Council of the City of Chowchilla at a regular meeting held on the 20th day of April, 2010 by the following vote to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

[Signature]
Cari Kopschover, Mayor

ATTEST:

[Signature] Deputy City Clerk
Cathy Black, Acting City Clerk

RESOLUTION NO. 01-2010

A RESOLUTION OF THE CHOWCHILLA DISTRICT CHAMBER OF COMMERCE SUPPORTING THE HIGH SPEED RAIL AUTHORITY ALIGNMENT DESIGNATED AS "A1"

WHEREAS, THE VOTERS OF THE STATE OF California has approved funding of the high speed rail system designed to travel from Los Angeles to San Francisco and to points in between.

WHEREAS, the High Speed Rail Authority has selected two potential north/south routes designated as "A1" near or along the existing BNSF right of way and "A2" near or along the UPRR right of way.

WHEREAS, The Chowchilla District Chamber of Commerce Supports the High Speed Rail System in California as a vital component of the future of the San Joaquin Valley and the entire State of California.

WHEREAS, Directors of the Chowchilla District Chamber of Commerce have attended public hearings provided by the High Speed Rail Authority and participated in attempting to identify alternate rail routes that would minimize the impact on The City of Chowchilla businesses and district agriculture.

NOW, THEREFORE, LET IS BE RESOLVED that the Board of Directors of the Chowchilla District Chamber of Commerce hereby resolves, finds, and orders as follows:

- 1. The above recitals are true and correct.
2. The Chowchilla District Chamber of Commerce supports High Speed Rail Alignment along the Santa Fe Railroad Corridor, designated as "A1" by the High Speed Rail Authority.
3. This Alignment follows an established transportation corridor and mitigates any negative effects on the City of Chowchilla.
4. The Chowchilla District Chamber of Commerce does not support The High Speed Rail Alignment along the Union Pacific Railroad, designated as "A2" by the High Speed Rail Authority. This alignment creates short and long term negative effects on the City of Chowchilla, its retail and commercial corridors, and potential loss of businesses and jobs.
5. The Chowchilla District Chamber of Commerce supports the East/West Alignment of the High Speed Rail to be placed on Avenue 21 as it enters Madera County from the West. The Chamber further supports the East/West to North/South "Y" connection to be placed at the intersection of Avenue 21 and the Santa Fe Railroad (A1). This alignment and connection has been proposed to the High Speed Rail staff. This connection and alignment minimizes the negative effects on farm land, the Fairmead Fossil Discovery Center, major businesses along Avenue 24 and at Highway 99 & Avenue 24, and the City of Chowchilla.

PASSED AND ADOPTED by the Chowchilla District Chamber of Commerce at a special meeting held on May 21, 2010 by the follow vote to wit:

AYES: [Signature]
NOES:
ABSENT: [Signature]
ABSTAIN: [Signature]

[Signature]
Vern Moss, President

ATTEST:

[Signature]
Jacki Flanagan, Chamber Manager

Attachment to Submission 16 (C. William Brewer, Motschieder, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued



April 30, 2010

Mr. Curt Pringle, Chairman
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

Dear Chairman Pringle:

At the April 14, 2010 Madera County Economic Development Commission (MCEDC) Board of Directors meeting a motion was unanimously passed putting the MCEDC on record opposing the proposed A-2 alignment and, unless the California High Speed Rail Authority (HSR) can propose an alternative route that is acceptable by both the cities of Madera and Chowchilla MCEDC will only support the A-1 alignment.

The major concern that MCEDC has with the A-2 route is that it will run through the middle of each of our two cities and impacts residential, commercial and industrial sites.

There are significant industrial facilities that would be negatively impacted. HSR staff has stated relocation money would be offered to these businesses, however, when an industrial site is located, it cannot be randomly relocated a 1/2 mile away. Industrial users select sites for very specific reasons and if forced to relocate the prospect of them remaining in Madera County, or even the State of California, is very low at best.

Displacement of commercial businesses that are operating in the Downtown Madera area would also face challenging relocation circumstances. Most all of the businesses in the downtown area service a "walking" clientele. Furthermore they are paying rental rates that are a fraction of other areas in the City of Madera and relocation would create a financial hardship on those business owners.

Future retail projects that are proposed for the Ave. 17 interchange will be harshly impoired by the A-2 alignment. Many will not move forward with existing development plans when faced with the severe impacts of the A-2 route considering the taking of key property, imposing barriers to freeway visibility and an array of other issues. This area is critical to the future commercial development for the City of Madera and can have enormous negative impacts on future revenues.

In Chowchilla many business would also be displaced and the new "commercial/industrial" growth center would be destroyed. The newly proposed Robertson Ave/Hwy 233 Interchange would most likely have to be redesigned and future transportation routes are also in jeopardy.

There is no advantage to the cities or the county if the A-2 route is selected and the two major population centers are cut in half by a high speed rail system that will do no more than run through the County of Madera and its two cities at speeds in excess 200 MPH every 7-10 minutes not stopping until they reach either Fresno on the south or Merced on the north.

MCEDC urges that the HSR move quickly to resolve this issue as already in jeopardy is the possible loss of \$5 million in Federal Economic Development Agency money. MCEDC finds it unacceptable that the HSR Board does not take immediate action to assure the hard work and expense to each city to secure the above mentioned grant funds, not to mention the future revenues generated from these projects, are not lost.

Please feel free to contact me if you or your staff has any questions regarding this matter and we are more than willing to meet with appropriate staff to expedite solving this grave problem.

Respectfully submitted,

Bobby Kahn
Executive Director

- Cc:
Board Members
Tom Imberg
David Crane
Rod Diridon, Sr.
Richard Katz
Liam Schenk
Fran Flores
Judge Quentin L. Kopp
Russ Dams

Executive Director
Carie Poursoliani

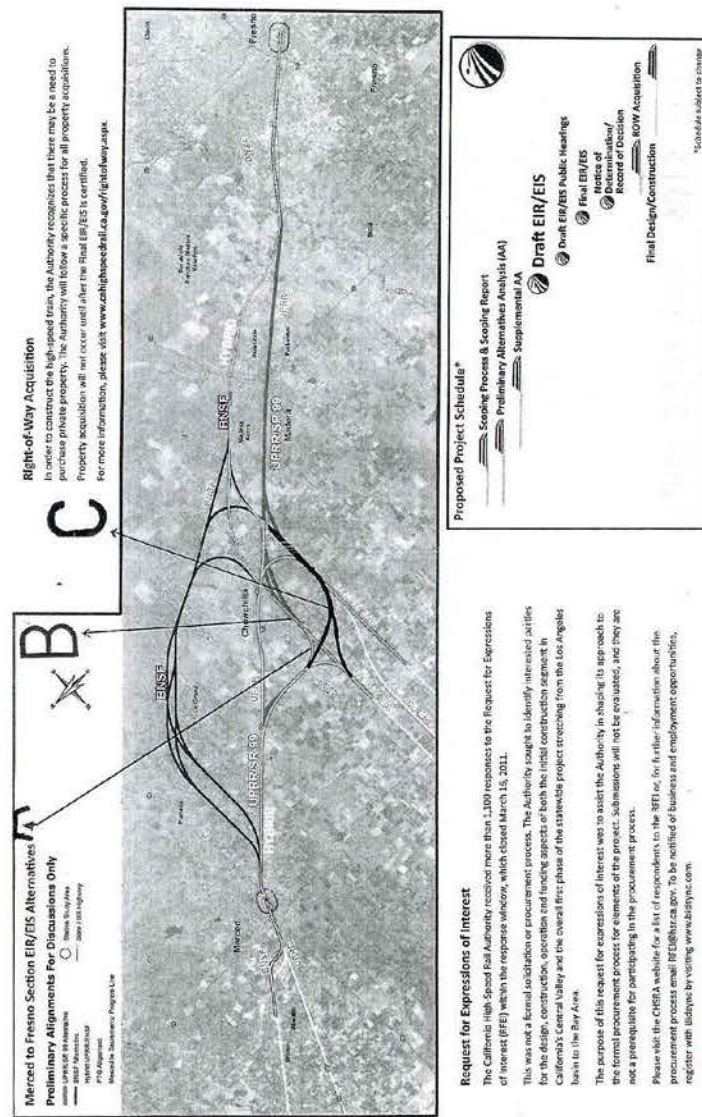
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Attachment to Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, January 23, 2012) - Continued

If HSR Authority chooses A2-UPRR, then we want them to adapt wider curve "A" going into "C" and vice versa, rather than smaller curve "A" going into "B". By choosing wider curve "A" going into curve "C" will help to maintain the required speed and avoid the conflict with A2-UPRR opposing resolutions approved by different cities, counties and entities.



Response to Submission 16 (C. William Brewer, Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, March 5, 2012)

16-485

This letter is identical to one submitted on October 11, 2011 by C. William Brewer with Motschiedler, Michaelides, Wishon, Brewer & Ryan, LLP, on the Merced to Fresno Section Draft EIR/EIS; Opposition to A2-UPRR/Avenue 24 (Henry Miller) alignment(s); and Preferred Alternative and Suggestions. Because the comments contained within this letter appear to address the Merced to Fresno Section project-level environmental document, the reader is referred to the Response to Comments in the Final EIR/EIS for the Merced to Fresno Section. These comments are outside the scope of the first-tier programmatic analysis conducted for the 2012 Partially Revised Program EIR.

The Authority acknowledges the opposition of the represented property owners to the A2-UPRR/Avenue 24 (Henry Miller) alignment(s). The Bay Area to Central Valley study area does overlap in part with the study area for the Merced to Fresno second-tier project. The Authority has made clear that it will not make any decision related to the wye connection between the Bay Area and Central Valley as part of the Merced to Fresno second-tier EIR/EIS. The Authority also intends to complete its revised program EIR process prior to completing its Merced to Fresno second-tier EIR/EIS process.

The comments address details about second-tier alternatives for the east/west alignment and wye connection between the Bay Area and Central Valley. The Authority will continue detailed study of the east/west alignment and wye connection between the Bay Area and Central Valley as part of a San Jose to Merced Section second-tier EIR/EIS if the Authority selects a network alternative involving this area at the conclusion of the Program EIR process.

16-486

Refer to Response to Comment 16-485 above.

16-487

Refer to Response to Comment 16-485 above.

16-488

Refer to Response to Comment 16-485 above.

16-489

Refer to Response to Comment 16-485 above.

16-490

Refer to Response to Comment 16-485 above.

16-491

Refer to Response to Comment 16-485 above.

16-492

Refer to Response to Comment 16-485 above.

16-493

Refer to Response to Comment 16-485 above.

16-494

Refer to Response to Comment 16-485 above.

16-495

Refer to Response to Comment 16-485 above.

Submission 23 (Mike N. Oliphant, Chevron Environmental Management Company, February 8, 2012)



Mike N. Oliphant, Environmental Project Manager, Chevron Environmental Management Company, P.O. Box 6012, San Ramon, CA 94583, Tel (925) 790 6431, Fax (925) 790 6772, mike.oliphant@chevron.com

23-21

Mr. John Mason - California HSR Authority, February 8, 2012, Page 2 of 2

February 8, 2012

Stakeholder Correspondence - California High-Speed Rail Authority

Mr. John Mason, California High-Speed Rail Authority, Bay Area to Central Valley Draft EIR Comments, 770 L Street, Suite 800, Sacramento, California 95814

Subject: Bay Area to Central Valley High-Speed Rail Partially Revised Program Environmental Impact Report Comment, Chevron Environmental Management Company, Historical Pipeline Portfolio-Bakersfield to Richmond

Dear Mr. Mason:

23-21

Chevron Environmental Management Company (CEMC) recently reviewed the Partially Revised Draft Program Environmental Impact Report (DEIR) for the proposed California High-Speed Rail (HSR): Fresno to Bakersfield Segment. The purpose of this letter is to notify the California HSR Authority and stakeholders as to the location of a formerly active crude-oil pipelines located in the Central Valley area (Figure 1), and to provide background information about the former pipelines. The intent is that information regarding the location and construction of this former pipeline will be incorporated into future planning and engineering documents associated with the proposed California HSR: Bay Area to Central Valley Segment.

Portions of the former Old Valley Pipeline (OVP) and Tidewater Associated Oil Company (TAOC) pipelines existed within the Central Valley footprint of the proposed California HSR: Bay Area to Central Valley Segment (Figure 1). The historic pipelines were constructed in the early 1900s and carried crude oil from the southern San Joaquin Valley to the Bay Area. Pipeline operations for the OVP ceased in the 1940s, and in the 1970s for the TAOC pipelines.

The pipelines were originally installed at depths ranging from 18 inches to 10 feet below ground surface. The steel pipelines were typically encased in a protective coating composed of coal tar and asbestos-containing felt material (ACM). When pipeline operations ceased, the pipelines were taken out of commission. The degree and method of decommission varied; in some instances the pipelines were removed, while in others they remain in place. It should be noted that the OVP and TAOC pipelines are not included in the Underground Service Alert-North (USA-North) system since they are not active pipelines.

Evidence of historical releases associated with the former OVP and TAOC pipelines is sometimes identified during the course of underground utility work and other subsurface construction activities near the former pipeline rights of way (ROWs). Residual weathered crude oil associated with former OVP and TAOC pipeline operations can usually be observed visually; however, analytical testing is necessary to

confirm the identity of the affected material. Analytical results from risk assessments performed by CEMC at numerous historical pipeline release sites confirm that soil affected by the historical release of crude oil from the pipeline is non-hazardous.

Figure 1 illustrates the location of the former OVP and TAOC ROWs within the proposed footprint of the California HSR project in Merced County, as shown in the DEIR. CEMC understands that there are several construction options being evaluated as part of the DEIR. To facilitate incorporation of the information contained in this letter into project planning and engineering documents, CEMC can provide Geographic Information System pipeline location files to project planners on request.

CEMC recommends that the California HSR Authority be prepared to potentially address residual weathered crude oil, pipelines, and ACM from the former OVP and/or TAOC systems during subsurface construction activities conducted in proximity to the former pipeline ROWs. This potentiality is easily managed with some advanced planning. CEMC would appreciate being informed of any encountered petroleum, pipeline, and pipeline-related ACM in the vicinity of the former OVP and/or TAOC ROWs.

For more information regarding these historic pipelines, please visit http://www.hppinfo.com/. If you have any questions, require additional information, or would like to request more detailed maps, please contact SAIC consultants Tom Burns (thomas.a.burns@saic.com) at (916) 979-3748 or Daniel Anzelon (daniel.b.anzelon@saic.com) at (858) 826-3316.

Sincerely,

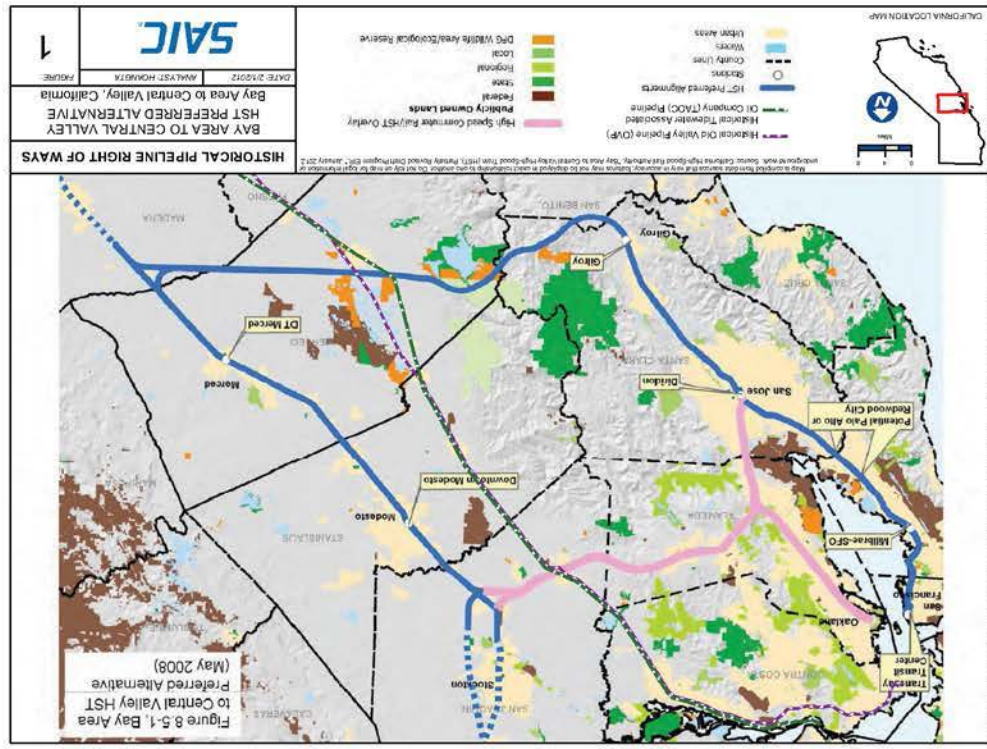
Mike Oliphant, MO/kg

Enclosures:

Figure 1. Area Map - California High-Speed Rail Project - Bay Area to Central Valley Segment

- cc: Mr. Tom Burns - SAIC, 3800 Watt Avenue, Suite 210, Sacramento, California 95821; Mr. Mike Hurd - SAIC (letter only), 1000 Broadway, Suite 675, Oakland, California 94607

Submission 23 (Mike N. Oliphant, Chevron Environmental Management Company, February 8, 2012) - Continued



Response to Submission 23 (Mike N. Oliphant, Chevron Environmental Management Company, February 13, 2012)

23-21

Comment acknowledged. Chapter 3.10 of the 2008 Final Program EIR assessed public utility conflicts at a broad scale, with a focus on major conflicts such as electrical transmission lines, electrical substations or power stations, natural gas pipelines, and wastewater treatment facilities as representative of utility impacts. Utilities conflicts are considered significant, and mitigation strategies were identified. Furthermore, Section 3.11.6 explains that potential hazardous materials/waste sites, which would include an analysis of potential impacts related to the former Old Valley Pipeline and Tidewater Associated Oil Company pipelines along with other known and unknown potential hazards that may be encountered during construction, will be included in second-tier project-level environmental documents. Also refer to Standard Response 3 regarding level of detail.

Submission 27 (David Dearborn, Member of the San Jose DOT/ Coalition technical working committee, February 10, 2012)

February 10, 2012

To: John Mason, California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

From: David Dearborn, President, Willow Glen Neighborhood Association
Member, San Jose Downtown Business and Neighborhoods Coalition
Member of the San Jose DOT/ Coalition technical working committee

Re: "Bay Area to Central Valley HST Partially Revised Draft Program EIR Comments"

Sub: Cost of viaducts, crossings and grade separation through San Jose

Ref: "California High-Speed Rail Project Cost Changes from 2009 Report to 2012 Business Plan Capital Cost Estimates" dated October 2011.

Ref: SAN JOSE VISUAL DESIGN GUIDELINES / CALIFORNIA HIGH-SPEED TRAIN INFRASTRUCTURE
Draft: 8/28/11

Questions and request for information:

- 1) What is the total estimated cost of viaducts, crossings and grade separations through the City of San Jose from the southern City limit line to just north of Hwy 101 to the north.
- 2) What is the rough estimated cost of:
 - a) the Lick Quarry curve / over-crossing near Monterey Road?
 - b) the aerial portion between Curtner Avenue to the end of flare north of Diridon Station?

re: Draft 2012 Business Plan Capital Cost Estimates / Viaducts: Bay Area to Merced (or Chowchilla):

Additional viaducts: 21-25mile (page 10, Draft Capital Cost Est.)
Avg 2012 cost: \$50-94M /mile (page 14, Draft Capital Cost Est.)
"Majority of cost changes": \$2.607B "in San Jose" (pages 22 and 24, Draft Capital Cost Est.)

Questions /request for information:

If average viaduct cost is \$50-94/mile, and \$2.607B is "planned for "Increase in Viaduct Lengths"; then it appears the average cost per mile is about \$114M. Assuming design and construction through much of the 21-25 miles is in open less populated country in soils less prone to liquefaction it leaves unclear the cost of viaducts, crossings and grade separation of HST construction through San Jose.

From Page 10, 2012 Business Plan Capital Cost Estimates

Section	Increase in Viaduct from 2009 Report	Description for Increase in Viaduct Lengths
San Francisco -- San Jose	+ 1 miles (Lo and Hi)	Total length of viaducts is similar however the viaduct widths were increased from 2-track viaducts to 4-track viaducts for an integrated Caltrain / CHSTP operation, effectively doubling the cost of the previously assumed 2-track aerial structures.
San Jose -- Merced	+21 miles (Lo)	Added viaduct in the City of San Jose south of Diridon Station to reduce ground level impacts and to address conflicts with UPRR and Caltrain.
	+25 miles (Hi)	Added viaduct between San Jose and Gilroy as constraint points are too high and too close together to bring the alignment back to the ground level and is maintained as elevated structure. Additional viaduct length for the High Cost Option is to support a downtown Gilroy station and changes in alignment in the San Joaquin Valley.

27-498

From Page 14, 2012 Business Plan Capital Cost Estimates

2009 Report Unit Price Element	2009 Report* (\$1,000/mile)	2012 BP Unit Price Element	2012 BP* (\$1,000/mile)
Standard Structure	45,464	Elevated - 2 Track (20' Avg. Pier Ht)	49,708
High Structure	52,552	Elevated - 2 Track (30'-50' Avg. Pier Ht)	61,554 (avg)
		Elevated - 2 Track (60'-70' Avg. Pier Ht)	83,473 (avg)
Long Span	80,495	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht)	54,849
		Elevated Structure (LS) - 2 Track (30'-50' Avg. Pier Ht)	67,928 (avg)
		Elevated Structure (LS) - 2 Track (60'-70' Avg. Pier Ht)	82,389 (avg)
Waterway Crossing	110,945	Included with LS Structure	Refer to LS Structure
Elevated Structure w/ Straddle Bents	Not included	Elevated Structure Straddle over 2 RR - 2 track (30' Avg. Pier Ht)	94,320

* Shown in 2009 \$ for comparison purposes and includes contingencies

From Page 22, 2012 Business Plan Capital Cost Estimates

"The majority of the cost changes (86%) from 2009 Report to the current Low Cost Alternative include:

- \$ 2,607 million for added viaduct in the City of San Jose to reduce ground level impacts and to address conflicts with Union Pacific Railroad and Caltrain. Also, more viaduct structures have been implemented in Central Valley avoiding impacts to natural resources "

From Page 24, 2012 Business Plan Capital Cost Estimates

Report to the Legislature December 2009 +	\$ 6,041	This subtotal includes those elements that are additive and not resulting from new information on site conditions and stakeholder issues.	
+ Bridges & Viaducts	\$ 2,607	36%	Added viaduct in the City of San Jose to reduce ground level impacts and to address conflicts with UPRR and Caltrain.

Respectfully,



David Dearborn
1408 Hotspur Ct.
San Jose, CA 95125
cell 408.981.6599

cc: Ben Tripousis, CJS Trans. Policy Mgr.
Hans Larsen, Director, CSJ Dept. of Transportation
Scott Knies, Chair, SJDBN Coalition
Roland Lebrun, Member, Coalition Technical Team
BayArea-CentraValley@hst.ca.gov

Response to Submission 27 (David Dearborn, Member of the San Jose DOT/ Coalition technical working committee, March 9, 2012)

27-498

The questions posed in this question relate to the 2012 Draft Business Plan published in November of 2011 and not to the Partially Revised Draft Program EIR.

The relevant cost data is available in the supporting documents to the 2012 Draft Business Plan, "Cost Changes from 2009 Report to 2012 Business Plan Capital Cost Estimates," <http://www.cahighspeedrail.ca.gov/assets/0/152/302/321/02fa2469-ef00-4eb0-ac78-74edff7b4fc3.pdf>

Some points to note:

1. The \$2,607 million added for viaducts is for the entire section from San Jose to Chowchilla, not just in San Jose. Costs for the portion of the route to Merced are captured in the Merced to Fresno Section.
2. Unit prices for structures are provided in Section 2.6.1 of the above reference document with a summary table on p.14 providing unit costs/mile.

Questions and comment on the 2012 Draft Business Plan would best be submitted through the Authority's website: http://www.cahighspeedrail.ca.gov/contact.aspx?cat=Draft_2012_Business_Plan_Comments.

Submission 47 (Aaron Fukuda, CCHSRA [Citizens for California High Speed Rail Accountability], February 21, 2012)



February 19, 2012

Chairman Dan Richard
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report Comment Letter

Dear Chairman Richard,

The Citizens for California High Speed Rail Accountability (CCHSRA) would like to submit these comments on the Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report as prepared by the California High Speed Rail Authority (Authority).

CCHSRA is a grassroots community organization founded to ensure that the proposed California high-speed rail project does not adversely affect the economy, environment, or the quality of life of California's existing communities. The Authority's current plan would have a devastating and negative impact on the natural environment, agricultural environment, economy and local communities of the Central Valley. After a review of the this revised Program Environmental Impact Report (Program EIR), CCHSRA also believes that the high-speed rail project will have the same impacts to the Bay Area to Central Valley alignment.

Improper Tiered Environmental Document

It should be noted that the manner in which the Authority has proceeded with the environmental review process has been flawed. The general approach adopted by the Authority has been to utilize the "tiered" approach, which is to study the entire project at a Program level and divide the project into much smaller portions to study at a project level. Given that the Bay Area to Central Valley section has been litigated and is still in the Program Level, the Authority has continued to revise and rerelease this section for public review, therefore making the Program EIR in an incomplete state. The Authority has yet to provide a complete analysis of this project at a Program Level to necessitate the release of any Project Level EIR/EIS. CCHSRA therefore recommends that all project-level EIR/EIS documentation be removed from public review and be postponed until the Program level EIR work has been completed.

"Blended" Versus 4-Track System Inconsistency

The Program EIR consistently describes the Bay Area to Central Valley section as a 4-Track system that will have the Caltrain and Freight system on two outer tracks while high-speed trains will travel in two inner tracks. Recent news reports and statements

47-238

by the Chairman of the Authority indicate that negotiations and agreements are being developed to adopt a "blended" approach that will electrify the existing Caltrain/freight tracks to accommodate the high-speed rail and operate in conjunction with Caltrain and freight systems. The Program EIR does not provide any analysis of the "blended" approach nor any indication that it will be permanent or temporary. As the Authority has seen received much criticism, the standard practice of the Authority is to reach for solutions as a means for deferring criticism rather than truly finding solutions. The "blended" approach has yet to be put forth for environmental analysis, is missing from this Program EIR, and therefore cannot and should not be implemented. If the Authority intends to utilize the "blended" approach the Program EIR should be updated and release again for public review.

47-239

Urban Sprawl

As many communities in the Bay Area have pushed the limits of their development and have seen an inflation of housing costs, the Authority has failed to analyze current housing markets and pressures that could and most realistically lead to the exodus of Bay Area residents to Central Valley communities. As promoted by the Authority, the high-speed rail project is intended to offer a cost effective transportation for the San Francisco and Los Angeles residents. As residents see the allure of owning homes in the Central Valley and traveling via high-speed rail to high paying jobs in the San Francisco and Los Angeles markets, many of our Central Valley cities who have struggled with urban sprawl will potentially witness an influx of new residents seeking affordable housing and family friendly communities. This added influx of people will put undue pressure on small rural communities to manage growth and the loss of prime farm ground. As in the past, many of the Central Valley cities have failed to curb urban sprawl and currently find themselves with blighted downtown areas and lavish and spacious residential developments on the fringe on the cities.

CCHSRA requests that the Program EIR analyze the potential for residents in the Bay Area to relocate to the Central Valley with access to high speed rail. The analysis should include the number potential relocations and the distribution of these relocations. The analysis should include an analysis of the environmental impacts to the Central Valley cities that will see the potential influx of population and how they can and will handle the ability to serve and manage such an influx. If the impact is significant, which CCHSRA believes it will be, the Program EIR should include those measures that can be implemented both at a State and local level to address the influx of people into the Central Valley and away from population centers like San Francisco and Los Angeles.

47-240

Specific Comments on the Program EIR

Page 1-4 Program EIR:

"Project-level EIR work is ongoing for the Merced to Fresno section, which overlaps in part with the study area for this Partially Revised Program EIR."

It should be noted that a programmatic EIR is typically used to characterize one large project related by geography, actions, rules, regulations, plans or other general criteria. It allows for a more comprehensive consideration of effects, alternatives and cumulative impacts. From the statement above and recent timeline reports by Authority staff, the Authority dangerously verges on violating the intent and purpose

47-237

47-238

Submission 47 (Aaron Fukuda, CCHSRA [Citizens for California High Speed Rail Accountability], February 21, 2012) - Continued

47-240 of utilizing a programmatic approach. As the Merced to Fresno section of the high-speed rail project has been closed from the public review and comment process, while still allowing a programmatic document that geographically interfaces with the Merced to Fresno section still out for public review, the Authority verges on predetermining alignments by proceeding in such a quick manner. Information provided in this Program EIR could impact and change the information submitted within the Merced to Fresno Project level EIR/EIS. CCHSRA would like to strongly recommend that all work on the Merced to Fresno Draft EIR/EIS cease immediately until all documentation and decisions have been finalized on the Program EIR, and that all information provided in the Program EIR be analyzed for consistency with the Merced to Fresno Project Level EIR/EIS.

47-241 **Page 2-2 Program EIR:**
 "The FTA Guidance Manual classifies this as a "commuter rail mainline" corridor and uses a screening distance of 375 feet from track centerline."

Did the Authority utilize 375 from the centerline of all 4 tracks or the centerline of the outer freight rail track? The impact from sound could be significantly different based on the baseline starting point for the distance from the tracks for screening. All analysis would should also take into account the cumulative impact of the freight train plus CALTRAIN plus the high-speed train. The analysis should also take into account local jurisdictional noise and vibration standards, including screening distances used by these jurisdictions.

"In the urban areas and suburban areas of the San Francisco Peninsula and San Jose, the ambient noise is estimated to range from Ldn 57 to 66 dBA. In many of the residential areas close to the international airports at San Francisco (SFO) and San Jose (SJC), the ambient levels exceed Ldn 65 dBA."

"The difference in noise level associated with freight trains being moved 20 feet closer to the sensitive land use was approximately 0.5 dBA in the 24 hour noise exposure level (Ldn) used to characterize noise impacts using FTA methodology."

The Program EIR does not provide any evidence that the 0.5 dBA increase is appropriate or scientifically determined. It is not clear if field measurements were taken and in what condition.

47-242 **Page 2-4 Program EIR:**
"The HST alternative in the San Francisco to San Jose Corridor is intended to be a four-track, shared use alignment that would integrate with existing Caltrain passenger service as well as UPRR freight service."

The Authority has publically advertised the use of a "blended" system, which entails the use of combined trains on a dual set of tracks. The Program EIR indicates a 4-track system which will increase impacts significantly. The Authority should indicate their intentions within the Program EIR if the "blended" approach is simply a temporary system while the additional two tracks are added. The Authority should also be consistent with their public outreach in explaining to people the "blended" approach. If this approach is to be a temporary fix toward a long term achievement of a 4-track system, this should be conveyed in the Program EIR, Public Outreach and

47-242 all other documentation. There should be absolute clarity on this issue to avoid the ongoing mismanagement of information that is been the common practice with the Authority.

47-243 Although the analysis investigated the movement of Freight trains closer to sensitive receptors the Program EIR does not analyze the overlapping sound given there is the potential for a freight train and/or Caltrain to coincide with a high-speed tainset at the same time. The Program EIR also does not analyze the increased frequency of a significant noise generator given the addition of high-speed trainsets. An environment that once only experienced freight rail or Caltrain at any given time will now have more frequent noise events and some will overlap. This same type of analysis should also be provided for vibration and its impacts to nearby receptors.

47-244 **Page 2-9 Program EIR:**
"Noise barriers would be an effective strategy for mitigating Monterey Highway traffic noise as well as noise from the high-speed train."

The Authority should provide an analysis for the impacts due to sound barriers. Often these walls are large structures that block views, introduce safety concerns and are often targets of vandalism. It should also be noted that traveling along Highway 101 and the Monterey Highway is visually a scenic route which includes rolling hills and the surrounding communities. The inclusion of sound walls will block much of this view for the traveling public and the local residents. As part of a programmatic look at mitigation measures, the Authority only provides one alternative to mitigate noise and vibration impacts of which it carries its own impacts to the environment and the traveling public. Other sound blocking techniques could include setbacks, vegetation, trees, etc. The Program EIR is deficient in supplying viable alternatives to mitigate for significant impacts such as sound and vibration.

"Consistent with the conclusions about noise and vibration in the 2008 Final Program EIR, the above mitigation strategies are expected to reduce to a less than significant level the noise impacts from shifting the Monterey Highway, as well as the noise impacts of the potential for freight trains on the Peninsula to be closer to nearby land uses."

Again, the Program EIR does indicate that the mitigation measure will mitigate the sound to a less than significant level, however there is no discussion of the unintended impacts of the sound barriers or other mitigation features. The Program EIR proposes mitigation measures that have the potential to create unintended significant impacts which are not identified or discussed. Given the ability of project level EIR documents to tier from the Program level documents, the mitigation measures and analysis at the Program level should provide ample alternatives and analysis that a singular mitigation measure could be provided such that it solves the original impacts and does not create any secondary impact.

47-245 **Page 3-5 Program EIR:**
"The HST corridor on the San Francisco Peninsula may impact adjacent roadways by requiring right-of-way from public streets to accommodate the HST project with existing Caltrain and freight service."

Submission 47 (Aaron Fukuda, CCHSRA [Citizens for California High Speed Rail Accountability], February 21, 2012) - Continued

47-245

Given the Authority intends to approach this section as a "blended" system which share tracks, why is there a need to acquire more right-of-way. The Program EIR should be consistent with the approach intended to be followed by the Authority.

47-246

Page 4-7 Program EIR

"Within an active rail corridor, HST construction as noted above would continue on one side of the right-of-way while passenger and freight rail operations continue on the other. Once completed, Caltrain and freight service would be shifted from the shoofly tracks onto the new, permanent tracks. To complete a four-track system within an active rail corridor, additional tracks would be constructed along with the associated grade separations, permanent station platforms and signal system generally within the existing right-of-way. The last step would be to shift all HST, Caltrain and freight service to the new four-track alignment and to relinquish the temporary construction easement."

If the Authority intends to pursue the "blended" system then the use of this description is not consistent. The Bay Area is under the assumption that the "blended" system is the permanent system to be installed.

Conclusion

CCHSRA respectfully submits these comments and request that the Program EIR for the Bay Area to Central Valley be removed and revised for the above comments, and incorporate a full analysis of the "blended" system.

Sincerely,



Aaron Fukuda
Co Chairman, CCHSRA

cc: Governor Jerry Brown

Response to Submission 47 (Aaron Fukuda, CCHSRA (Citizens for California High Speed Rail Accountability), February 24, 2012)

47-237

The Authority disagrees with the commenter's assertion that the manner in which the Authority has proceeded with the environmental review process is flawed. This Program EIR is specifically designed to assist the Authority in making the fundamental choice of a preferred alignment within the broad corridor between and including the Altamont Pass and Pacheco Pass for the HST segment connecting the San Francisco Bay Area to the Central Valley. This Program EIR is tiered from the California High Speed Train Program EIR/EIS (statewide program EIR/EIS) that supported the Authority's selection of corridor alignments and station locations for the majority of the HST System. The statewide program EIR/EIS defined the broad corridor between and including the Altamont Pass and Pacheco Pass for further programmatic study that is now contained in this Program EIR. Furthermore, as described in Chapter 1 in the process of responding to the *Atherton 1* and *Atherton 2* litigation, the court has not required the Authority to halt the second-tier project-level environmental studies for the Bay Area to Central Valley Sections, which includes the Merced to Fresno and San Jose to Merced Sections. However, in the event that the Board chooses a different network alternative and/or preferred alignments than those which have previously been selected, it may be necessary to make an adjustment to the project-level environmental work currently underway.

47-238

The Partially Revised Draft Program EIR discussed the phased implementation concepts in the Draft 2012 Business Plan, and identified the blended system approach and provided a general discussion of how it would differ from a full four-track alignment on the Caltrain Corridor. Additional discussion and analysis is provided in Standard Response 1. The information in the Draft and Revised 2012 Business Plans about a blended system does not indicate a need for further revision and recirculation of the Program EIR. The analysis provided in the Program EIR is sufficient for decision making

and public disclosure. A detailed blended proposal for a second-tier project is needed to provide more detailed discussion of environmental impacts in a second-tier EIR/EIS.

47-239

The growth-inducing impacts of the project as a whole have been analyzed in Chapter 5 of the 2008 Final Program EIR. This discussion identified the very high rate of growth projected under the No Project Alternative for San Joaquin and Merced Counties, as well as Sacramento County. The discussion indicates that the HST network alternatives would stimulate additional growth relative to the No Project Alternative, with the largest incremental growth occurring in the Central Valley counties. (Cambridge Systematics 2007) The chapter discusses secondary impacts of growth and how growth and indirect effects of growth can be managed. This analysis has been challenged in litigation and found adequate in the *Atherton 1* final judgment from 2009.

47-240

As indicated in this comment, this Partially Revised Final Program EIR is specifically designed to assist the Authority in making the fundamental choice of a preferred alignment within the broad corridor between and including the Altamont Pass and Pacheco Pass for the HST segment connecting the San Francisco Bay Area to the Central Valley. This document is tiered from the 2005 Statewide Program EIR/EIS that supported the Authority's selection of corridor alignments and station locations for the majority of the HST System, including alignments in the Central Valley between Merced and Bakersfield. The Statewide Program EIR/EIS defined the broad corridor between and including the Altamont Pass and Pacheco Pass for further programmatic study that is now contained in this Partially Revised Final Program EIR.

The Authority disagrees that the process it is undertaking to correct the Program EIR “verges on predetermining alignments.” The Authority has taken care to be clear that it must make a new decision at the program level following completion of the corrections to the Program EIR. Please refer to Standard Response 2 for more discussion of the Authority’s procedural approach to correcting the Program EIR.

This Partially Revised Final Program EIR does not and is not intended to provide a detailed analysis of the wyes connecting the San Jose to Merced Section east-west alignments with the Merced to Fresno Section north-south alignments. Any potential environmental impacts of the wyes that are not within the Merced to Fresno project footprint, including new wye alternatives developed in coordination with local agencies and the public, will be analyzed in the upcoming San Jose to Merced Section EIR/EIS if the Authority Board chooses a Pacheco Pass network alternative. If the Authority Board chooses an Altamont Pass network alternative, there may be a need for adjustments to the Merced to Fresno second-tier EIR/EIS. The Merced to Fresno Draft EIR/EIS clearly stated that it would not be used by the Authority or the Federal Railroad Administration to make a decision on the east/west alignment and wye, therefore, the Merced to Fresno Draft EIR/EIS is not pre-determinative of the programmatic network alternative. As described on Section 1.5 of this Program EIR, in the process of responding to the *Atherton 1* and *Atherton 2* litigation the court has not required the Authority to halt the second-tier project-level environmental studies for the Bay Area to Central Valley Sections, which includes the Merced to Fresno and San Jose to Merced Sections. However, in the event that the Board chooses a different network alternative and/or preferred alignments than those which have previously been selected, it may be necessary to make an adjustment to the San Jose to Merced Section project-level environmental work currently underway.

While the comment correctly notes that the comment period on the Merced to Fresno Section EIR/EIS has been closed, the project-level environmental analyses for the San Jose to Merced Section have not been completed, the San Jose to Merced Section EIR/EIS has not been released to the public, and it is not currently under public review.

47-241

Please refer to Response to Comment 40-270 for a discussion of why the screening distance used is a conservative assessment, consistent with FRA and FTA guidance.

47-242

The Draft 2012 Business Plan discussed a blended system approach for an alignment between San Francisco and San Jose along the Caltrain Corridor. The Partially Revised Final Program EIR discusses the blended system approach in Chapter 5. Please also refer to Standard Response 1 for more discussion and for an explanation of how continued consideration of a four-track alignment for the Caltrain Corridor in the Program EIR is consistent with CEQA. More detailed planning work is necessary to define the parameters of a blended system approach for an alignment between San Francisco to San Jose on the Caltrain Corridor. Based on information developed for the 2012 Draft Business Plan, it is anticipated that a blended system approach would provide sufficient capacity for the initial HST service (2-4 trains per hour per direction “in the peak period”) between San Francisco and San Jose in 2029. As passenger demand on the HST system grows, the Authority in partnership with Caltrain will continue to evaluate both operational and infrastructure based solutions for supplying additional passenger capacity. Depending on the outcome of that capacity analysis, additional environmental clearance may be required and the public will be invited to participate in that process.

47-243

The FRA screening methodology for program-level evaluations is based on identifying the number of sensitive receptors that could be exposed to significant increases in noise over a 24-hour period using a scale weighted to account for increased sensitivity to nighttime exposure. Conservative screening distances provided by FRA and FTA are used to accomplish this. In the program-level evaluation, the corridor centerline is established in order to compare between alignment alternatives, but specific track configurations are not determined until an alignment is selected.

The project-level analysis will evaluate in detail the totality of noise from all three train sources (freight, Caltrain, HST) taking into account the location of tracks on which they would operate within the right-of-way. According to FRA methodology, the project-level noise analysis considers noise exposure over a 24-hour period, thereby capturing a weighted average of the noise of all trains in the corridor and the times that they operate. In this manner, the analysis will capture the potential for increased ambient noise due to additional train frequency and any new tracks or movement of tracks. The project analysis will also account for the effect on operational noise due to the elimination of train horn usage in the corridor as a result of grade-separating the alignment.

Detailed vibration effects at individual receptors will also be evaluated in the project-level noise and vibration analysis, consistent with FRA methodology. The methodology for project-level evaluations indicates that existing condition information should be captured through measurements in the corridor. Operational conditions for all train service in the corridor will be modeled. The existing ambient vibration conditions will be used as a baseline. The analysis will evaluate the potential vibration from each rail source (freight, Caltrain and HST). The significance of vibration impact will be determined using the criteria in the FRA methodology.

47-244

The Partially Revised Draft Program EIR addresses those topics identified in the final judgment/order for the *Atherton 1* and *Atherton 2* litigation as requiring corrective work under CEQA. The range of noise mitigation strategies and potential secondary effects from the use of these mitigation strategies were one of those topics.

The design of noise barriers appropriate for the proposed HST would depend on the location of noise-sensitive buildings after Monterey Highway and the freight train tracks have been shifted, as well as the speeds of the HST, the track elevation, and structure type. More detailed consideration of noise impacts and mitigation measures such as the height of soundwalls or other noise reducing measures will be included in project-level environmental documents.

Secondary effects, such as visual impacts, relating to the use of noise mitigation strategies were considered at a very broad scale, which is appropriate for this program-level of analysis. Furthermore, although these program EIRs provide a base from which project-level EIRs may tier from, they do not restrict the type of mitigation measures that may be considered to mitigate impacts. The aesthetic and community effects of sound barriers will be addressed in more detail as part of second-tier project development and environmental review when it will be possible to identify specific locations and size of sound barriers. With respect to Monterey Highway, the corridor already includes many soundwalls and property walls of varying age, condition, and associated landscaping (Kiesling, Memorandum on Existing Sound Barriers/Property Walls along Monterey Highway, 2012). With implementation of the project, these existing walls may be replaced with consideration of maintaining a high level of visual quality in neighborhood areas by implementing such measures as visual buffers, trees, and other landscaping, architectural design, and public artwork as noted in Chapter 3.7 of the 2008 Final Program EIR. Refer to Chapter 7A in the Partially Revised Final Program EIR for an additional mitigation strategy regarding the aesthetic treatments of sound walls, which would apply regardless of location along the HST system.

47-245

If the Authority selects a network alternative that uses all or a part of the Caltrain Corridor between San Francisco and San Jose, the Authority has the flexibility to consider a blended system approach to implementation at the second tier of project planning and environmental review. The Authority must complete its first-tier decision, and it will then be in a position to determine whether and how to proceed with a blended system on the Peninsula. The Partially Revised Draft Program EIR addressed the possibility of the need to acquire public street right-of-way to support a four-track system which was considered in the Alternatives Analysis prepared for the project. As discussed in Chapter 3, the acquisition of public street right-of-way could result in the loss of existing travel lanes which could increase traffic congestion. As discussed in Standard Response 1, if a blended system approach is pursued at the second

tier, the level of right-of-way needed for implementation would be vastly reduced as compared to a four-track alignment.

47-246

The comment is referring to text about construction impacts for a four-track alignment on the San Francisco Peninsula. Please refer to Standard Response 1, explaining why continued discussion of a four-track alignment on the Caltrain Corridor is consistent with CEQA.

Submission 48 (Gary A. Patton, Community Coalition on High-Speed Rail [CC-HSR], February 21, 2012)

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OF COUNSEL
Gary A. Patton

February 21, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
Attention: Bay Area to Central Valley HST Partially Revised Program EIR Comment

RE: Comments Submitted on Behalf of Community Coalition on High-Speed Rail
Sent By Email – BayArea-CentralValley@hsr.ca.gov

Dear Mr. Mason:

This comment letter is submitted on behalf of the Community Coalition on High-Speed Rail ("CC-HSR"). CC-HSR is a grassroots, non-profit corporation, based on the San Francisco Peninsula, that is working to make sure that the proposed California High Speed Rail project doesn't adversely affect the economy, environment, or quality of life of California's existing communities. In addition to comments contained in a letter to be separately submitted by CC-HSR and other organizations, CC-HSR has the following comments on the *Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report* released for public comment on January 6, 2012:

48-247

1. As you know, the California High-Speed Rail Authority ("Authority") has now been ordered by the Superior Court in Sacramento County to rescind its approval of the most recent program level EIR for the Bay Area to Central Valley portion of the proposed high-speed train project. So far, the Authority has not yet taken that action. CC-HSR believes that seeking comments on a new draft document, when another and different document is currently certified as *the* program level EIR for the Bay Area to Central Valley portion of the proposed high-speed train project, is premature. We believe that the Authority may properly solicit comments on a new Draft EIR document only after the Board of Directors of the Authority has taken action to decertify the current document, and has directed that a new document be circulated, properly describing the project the Authority is then proposing. We object to the effort to "rush" this document through the environmental review process required by the California Environmental Quality Act (CEQA), and believe that all members of the public should be given at least 45 days to review a document that the Authority's Board of Directors has specifically ordered be circulated, to address the legal deficiencies identified by the Superior Court, and generally to provide an adequate environmental review of the proposed action, as further outlined in this comment letter.

48-531

2. The importance of the point made in Comment #1 is highlighted by the fact that the Authority has made major modifications to its proposed project since the certification of the current EIR document for the Bay Area to Central Valley portion of the statewide project. One important change included in the "Business Plan" issued by the Authority in November 2011 identifies a "blended system" approach in the Bay Area. Despite the claims made in the current Draft EIR, beginning on page 5-3, this modification to the project, as now contemplated by the Authority, not been properly analyzed in the *Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report* circulated for comment on January 6, 2012. As an example, the use of the "blended system" approach on the Peninsula would result in significant impacts to residents, businesses, and communities by way of possible street closures, noise, vibration, and related effects. These have not been outlined and analyzed, as CEQA requires. That deficiency in the description of and analysis of the new project now being contemplated by the Authority must be remedied, and a revised draft document must then be recirculated for further public comment.

48-532

3. Comment #2 reflects the requirements of the California Environmental Quality Act (CEQA), which demands that the Draft EIR made available for public comment accurately reflect the actual "project" being proposed. According to reliable information, including many news reports quoting the Chairperson of the Authority and the Governor of the State of California, the Authority is planning shortly to revise its proposed project once again – and in potentially very significant ways. If it does so, the Draft EIR circulated for comment must accurately outline the actual "project" being proposed for implementation by the Authority. It is worth emphasizing that the "agency" which is proposing the project is the Authority. Actions of the staff and consultants to the Authority, not ratified or endorsed by any action of the Authority's Board of Directors, are not the kind of actions that can support the kind of responsible environmental review that CEQA demands. In short, the public needs to know what the actual "project" is that the Authority proposes, before it can be asked to make comments on a Draft environmental document. The fact that the document currently being circulated for comments is a so-called "program level" EIR does not obviate this fact. The overall project being proposed has changed significantly since the Program Level EIR for the rest of the state was certified (without challenge) in July 2008. Since an important portion of the proposed system was not determined at that time (namely, the Bay Area to Central Valley portion of the proposed statewide system), any "program level" EIR for that segment must reflect the currently-proposed statewide project. Again, that project is not accurately disclosed or analyzed in the current Draft EIR. If the project is again changed by the Authority, prior to certification of the program level EIR for the Bay Area to Central Valley section of the project, the Draft EIR circulated for public comment must describe and analyze the then-proposed project.

48-533

4. The fact that comments are being made by individuals and groups not residing in the geographic area covered the Bay Area to Central Valley Draft EIR underscores the importance of Comment #3. Because the Authority did not certify a program level EIR for the entire statewide project in 2008, the changes now being proposed are of critical importance to those potentially affected in all areas of the state. The "program" for the

Submission 48 (Gary A. Patton, Community Coalition on High-Speed Rail [CC-HSR], February 21, 2012) - Continued

3

48-533 entire state, in other words, is not yet clear, and when significant changes are made in the project, those changes must be analyzed in a program level EIR, and everyone in the state must be given an adequate opportunity to understand what is being proposed and to comment. The changes in the statewide project made by the most recent "Business Plan" affect the statewide "program," and have not been adequately documented, described, or analyzed in accordance with the requirements of CEQA. If further significant changes are made in the near future, before the certification of the program level EIR for the Bay Area to Central Valley portion of the statewide project (and this is what statements from the Chairperson of the Authority indicate will happen), then the EIR document must also describe and analyze the actual project then being proposed, and the public must be given an opportunity to comment.

48-249 5. The Authority claims that comments on the *Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report* should be limited to the materials contained within that document. We disagree. The standard that is set in *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112 is that public comment must be allowed if there is new information or changed circumstances that have arisen since the EIR was last circulated, which is the case here. CC-HSR objects to the Authority's effort to dissuade the public from making comments as allowed by law.

48-250 6. The *Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report* states, at page 1-4, that the Authority is working on a "project level" EIR for a section of the proposed project from San Jose to Merced. Once the Authority has rescinded its approval of the EIR found invalid in the recent decisions of the Superior Court mentioned on page 1-1, there will not be any adopted alignment between San Jose and the Central Valley. This comment reinforces the earlier comments: the Authority is acting like it can make up its mind on what route it will use between the Bay Area and the Central Valley before it has completed a legally-sufficient EIR. This is a fundamental violation of CEQA.

48-536 7. The Authority also believes, apparently, that it can continue to work on a "project level" EIR for an alignment that has not yet been legally selected, and then disregard the information it develops in doing that "project level" analysis as it makes a determination of what route it will select at the "program level." Again, this is a fundamental violation of CEQA. While it is true, as the Draft EIR says at Page 1-4, that the "court has not required the Authority to halt its second-tier, project-level environmental studies for the Bay Area to Central Valley sections..." this does not mean that the court has validated a process by which the Authority can ignore information that is relevant to the program level determination, when that information is actually and currently available. Environmental work done on both the San Jose to Merced section and the San Jose to San Francisco section must be analyzed in the program level document, and the current Draft EIR is deficient because it has not done that. CC-HSR asks that all pertinent information be reviewed and included in a new Draft Program Level EIR for the Bay Area to Central Valley portion of the statewide project, and that the revised document then be circulated for public comment. Concerns of communities on the San Francisco Peninsula have been

4

48-536 shortchanged in this program level review because of the failure of the Authority to consider the information developed in its so-called "Alternatives Analysis." This is a serious deficiency and must be corrected.

48-251 8. The apparent rejection of below grade options along the Caltrain alignment on the Peninsula (one of the conclusions of the Authority's "Alternatives Analysis") will result in a certainty of noise, vibration, and other impacts to Peninsula communities which must be documented, and explained (and upon which public comments must be permitted), so that the Authority can properly determine whether an alternative that eliminates or reduces the use of the Caltrain right of way is not a preferable way to connect the Bay Area to the Central Valley. Again, the current environmental impact analysis is inadequate and fails to meet the requirements of CEQA.

48-252 9. On page 5-3, the *Bay Area to Central Valley High-Speed Train Partially Revised DRAFT Program Environmental Impact Report* notes that new information has been developed on the use of the Altamont Corridor, subsequent to the Authority's 2010 Revised Final Program EIR for the Bay Area to Central Valley portion of the statewide system. Again, the Authority is not allowed to disregard this information, as it does its environmental review at the program level. The current Draft environmental document does not examine the implications of the new information that the Authority now has on the Altamont alignment, and it must do so, to comply with CEQA. The Authority needs to redo the current Draft EIR, to take account of that information, and then circulate the revised document for public comment.

48-253 The CC-HSR respectfully requests the Authority to proceed as follows: (1) take the actions required by the Superior Court and rescind the Authority's previous certification of the EIR for the Bay Area to Central Valley portion of the proposed statewide HST system; (2) simultaneously vacate the Authority's determination to achieve the Bay Area to Central Valley connection through the Pacheco Pass alignment; (3) subsequent to the promulgation of the next version of the Authority's "Business Plan," outlining the "project" that the Authority wishes to pursue, utilize all available information, including information generated by the Authority in its work on "project level" environmental analyses, and its work on the Altamont Corridor Rail Project, to complete a program level EIR for the Bay Area to Central Valley portion of the proposed project; and (4) circulate that new Draft EIR for public comment, accepting comments on all the environmental issues related to the project as then defined by the Authority.

Thank you for taking these comments into consideration, and for fully complying with the requirements of the California Environmental Quality Act.

Yours truly,

 Gary A. Patton, Of Counsel
 MULLER & PARKIN, LLP
 Attorneys for Community Coalition on High-Speed Rail

Response to Submission 48 (Gary A. Patton, Community Coalition on High-Speed Rail (CC-HSR), February 24, 2012)

48-247

Comment acknowledged. Please Refer to Standard Response 2 regarding the Authority's procedural approach to complying with CEQA in light of the final court judgment/order and ongoing second-tier project work.

48-531

The Authority has not changed its first-tier project. The Draft 2012 Business Plan and the Revised 2012 Business Plan likewise do not change the first-tier project. The environmental implications of a blended system approach are discussed in Chapter 5, as well as in Standard Response 1, at a programmatic level of detail. The Authority does not agree that the first-tier EIR must be revised and recirculated again based on implementation details about a second-tier project.

48-532

The Authority agrees that an EIR must describe the project being proposed. At the first-tier, the Partially Revised Draft Program EIR and Partially Revised Final Program EIR does this. The first-tier project is selection of the general network alternative, alignments, and station locations for the Bay Area to Central Valley HST connection. Chapter 5 describes the environmental implications of phased implementation, including a blended system approach, to ensure that even at a programmatic level the environmental impact implications are appropriately disclosed and considered. As explained in Standard Response 1, detailed analysis of a blended system approach to implementing HST in the Caltrain Corridor must be analyzed at the second-tier after it has been developed and described in more detail.

48-533

The Authority agrees that the discussion in the Draft and Revised 2012 Business Plan about phasing implementation of the statewide HST system and the blended system approach for "bookend"

sections in the Bay Area and Los Angeles area are of critical importance to those outside the Bay Area to Central Valley study area. The Authority does not agree, however, that the statewide HST system has changed or is otherwise unclear. As explained in Standard Response 1 and Standard Response 2, as well as the Revised 2012 Business Plan, the portion of the statewide HST system that is not yet finalized is the general route from the Central Valley into the Bay Area. Depending on the outcome of the Program EIR process, some discussions in the Revised 2012 Business Plan about phasing and the blended system approach would be subject to adjustment and refinement as part of second-tier projects.

48-249

The Authority has followed CEQA Guidelines Section 15088.5 in crafting its notices and introductory text for the Partially Revised Draft Program EIR. That Guideline specifically provides that a lead agency may request that reviewers limit their comments to the materials that have changed. The Authority's process has therefore complied with CEQA.

Moreover, the Authority deliberately and thoroughly considered whether new information and changes conditions since the EIR last circulated would result in a need to change any of the prior analysis in Chapter 5, entitled "New Information and Changed Conditions Since September 2, 2010, Prior Decisions." The public was invited to comment on the materials in Chapter 5, and the Authority received extensive comments on this chapter. The Authority therefore disagrees with the comment that its process has dissuaded the public from making comments allowed by law.

48-250

The Authority has proceeded with second-tier planning and environmental analysis work while litigation on the Authority's 2010 Revised Final Program EIR was underway. During the ensuing

litigation, the Authority's quasi-legislative decisions are presumed adequate. Moreover, the Superior Court did not enjoin the Authority from engaging in second-tier planning and environmental review. The Authority disagrees that the environmental work that it has undertaken on a second-tier project from San Jose to Merced violates CEQA. It is not uncommon for lead agencies to undertake first-tier and second-tier planning concurrently. Please refer to Standard Response 2 discussing the Authority's procedural approach to complying with CEQA in light of the final court judgment/order and ongoing second-tier project work.

48-536

The Authority has not ignored information developed in the San Francisco to San Jose and the San Jose to Merced second-tier project and EIR processes. Chapter 5 specifically addresses the information being generated from the project-level work. The Partially Revised Draft Program EIR is intended to address information included in the second-tier process that the Superior Court determined must be considered as part of the first-tier EIR.

To the extent the comment implies that CEQA requires a second-tier level of detail in the first-tier EIR, the Authority respectfully disagrees with this perspective. The tiering process allows a lead agency to focus its EIR on the scope of the decision at hand.

48-251

The comment incorrectly states that the Authority has rejected below grade alignments for the Caltrain Corridor between San Francisco and San Jose. As part of the first-tier project to choose a network alternative to connect the Bay Area and the Central Valley, the Authority will not make a decision on the vertical profile of the track. The vertical profile of the track is a design detail that will be considered as part of second-tier project planning and environmental review if an alignment between San Francisco and San Jose is included in the selected network alternative in whole or in part. The Superior Court in the *Atherton 1* case held this approach complied with CEQA.

In addition, the noise, vibration, and other impacts on Peninsula communities of the HST have in fact been studied extensively, at a

first-tier or programmatic level of detail. The Authority does not agree with the comment that these issues have not been studied adequately in the existing programmatic EIR process.

The Authority placed its work on a second-tier project for San Francisco to San Jose on hold in May 2011. No decisions have been made about a second-tier project or the scope of environmental analysis in a second-tier EIR. At this time, it is anticipated that any further work on a second-tier project would have to start afresh, with a new second-tier planning and CEQA process and a new notice of preparation.

48-252

The comment suggests that the Authority is required to evaluate information being developed for the separate, slower speed regional commuter rail project called the Altamont Corridor Rail Project as part of this Program EIR. Section 5.1.2 explains that in preparing the Partially Revised Draft Program EIR, the February 2011 Preliminary Alternatives Analysis Report was reviewed to determine whether any information in it would result in a need to make revisions to the Program EIR analysis. The text explains that further revisions are not necessary.

Furthermore, in the *Atherton 2* case, the Superior Court concluded that the Authority's preliminary planning information on the Altamont Corridor Rail Project, including its inclusion of a potential corridor south of Livermore, did not undermine the range of alternatives in the Program EIR, which had preliminarily considered and rejected such a corridor for HST service. The Authority has further considered the Altamont Corridor Rail Project information and explained that it has concluded there is no need for further EIR revisions. The comment does not specifically identify any particular facts that would require further revision. No further revisions to the range of alternatives, impacts analysis, or mitigation measures are required.

Refer to Response to Comment 56-124 regarding a discussion of the Altamont Corridor Rail Project and how it differs from the HST project.

48-253

Comment acknowledged. As described in Section 1.4 of the 2012 Partially Revised Draft Program EIR, the *Atherton 1* and *Atherton 2* court rulings require the Authority to rescind its certification of the 2010 Revised Final Program EIR and to make a new decision based on this 2012 Partially Revised Final Program EIR. The 2012 Partially Revised Draft Program EIR contains the new analysis necessary to comply with the judgment of the court on all of the items listed in this comment. Based on that analysis as well as the information contained in this 2012 Partially Revised Final Program EIR, the Authority will decide whether or not to:

1. Certify this Partially Revised Final Program EIR (including the 2008 Final Program EIR and the 2010 Revised Final Program EIR) for compliance with CEQA
2. Approve findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program in compliance with CEQA
3. Approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs. The Authority disagrees that additional analysis is required related to the new information and changed conditions and that recirculation would also be required.

Refer to Standard Response 3 for a discussion of an appropriate level of detail in this first-tier document, and Standard Response 2 for a discussion of procedures and processes.

Submission 52 (Scott B. Birkey, Preserve Our Heritage, February 21, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #52 DETAIL
Status : Pending
Record Date : 2/21/2012
Response Requested :
Stakeholder Type : Other
Submission Date : 2/21/2012
Submission Method : Project Email
First Name : Scott B.
Last Name : Birkey
Professional Title : Partner
Business/Organization : Preserve Our Heritage
Address : 555 California Street
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Email : sbirkey@coxcastle.com
Fax : (415) 392-4250
Cell Phone :
Email Subscription :
Add to Mailing List :
Comment Type : Issue (concern, suggestion, complaint)

Stakeholder Comments/Issues : John Mason
 California High-Speed Rail Authority
 770 L Street, Suite 800
 Sacramento, CA 95814

Dear Mr. Mason:

On behalf of Preserve Our Heritage, we are submitting comments on the January 2012 Bay Area to Central Valley High-Speed Train Partially Revised Draft Program Environmental Impact Report ("Draft EIR") for the Bay Area to Central Valley High-Speed Train project (the "Project") prepared by the High Speed Rail Authority ("HSRA") pursuant to the California Environmental Quality Act ("CEQA").

Introduction and Summary

Preserve Our Heritage is an organization comprised of farmers and other agricultural interests in the Madera and Merced area of the California Central Valley. Preserve Our Heritage's members have lived and farmed in this region for generations, and they pride themselves on being good stewards of the land. After reviewing the Draft EIR, Preserve Our Heritage has significant concerns regarding the adequacy of the Draft EIR.

In summary, the Draft EIR inappropriately assumes a tiered environmental approach, and fails to evaluate urban sprawl and other growth-inducing effects resulting from the Project. Moreover, specific instances in the Draft EIR demonstrate the HSRA has given short shrift to even this revised environmental analysis of the Project in violation of CEQA.

The Draft EIR Improperly Assumes a Tiered Approach

A lead agency may "tier" EIRs for a sequence of actions so that the later EIRs incorporate and build on the information in the previous EIRs. (Pub. Res. Code Sections 21068.5, 21093; 14 Cal. Code Regs. Section 15152.) Tiering is only appropriate, however, when the lead agency is able to rely on a completed programmatic EIR that has been certified by the lead agency. (Pub. Res. Code Section 21094.) Only then may the lead agency determine whether the later, smaller project may rely on the overall programmatic EIR. Because the EIR for the Bay Area to Central Valley route is not complete, there is no completed, overall programmatic level of analysis from which the HSRA may tier project-level EIRs. As such, the HSRA's project-level EIRs -- such as the Merced to Fresno Draft EIR -- are all tiering off of an incomplete programmatic analysis. This is a violation of CEQA.

In addition, a second-tier EIR is invalid if the first-tier EIR is invalidated, even in those instances when the lawsuit challenging the first-tier EIR was not decided before the second-tier EIR was certified. (Friends of Santa Clara River v. Castaic Lake Water Agency (2002) 95 Cal.App.4th 1373.) The Draft EIR here has been the subject of much litigation. Two court decisions have found that the HSRA failed to comply with CEQA. (Atherton I; Atherton II.) These deficiencies infect the entire overall programmatic level of analysis for the High-Speed Rail Project, and cast doubt on the legitimacy and adequacy of that environmental review. Accordingly, the environmental review of any project-level EIR relying on the overall programmatic level of analysis is infected by the deficiencies identified by the courts in Atherton I and Atherton II. HSRA should hold back on issuing any further project-level EIRs and recirculating existing project-level EIRs until the Bay Area to Central Valley analysis and the rest of the overall project have been deemed sufficient by a court.

52-418

Submission 52 (Scott B. Birkey, Preserve Our Heritage, February 21, 2012) - Continued

52-419

The Draft EIR Fails to Evaluate Growth-Inducing Impacts

An EIR must describe any growth-inducing impacts of the proposed project. (Pub. Res. Code Section 21100(b)(5); 14 Cal. Code Regs. Section 15126(d).) For example, an EIR must discuss the ways in which the project could directly or indirectly foster economic or population growth or the construction of new housing in the surrounding environment. (14 Cal. Code Regs. Section 15126.2(d).) Put simply, an EIR must evaluate urban sprawl and other growth-inducing impacts that could result from a project.

The Draft EIR here failed to include any analysis of growth-inducing impacts related to either the Project as a whole or those portions of the Project analysis that have been revised in the Draft EIR. This, too, is a violation of CEQA. Shifting Monterey Highway and moving freight tracks closer to adjacent land uses along the San Francisco Peninsula could displace thousands of residents and businesses, who will be forced to relocate further outside existing urban areas as a result. These relocated land uses will take up space on the fringes and beyond existing development, creating classic urban sprawl. Yet none of these impacts are identified, let alone evaluated, in the Draft EIR. The EIR's failure to review these impacts is inconsistent with the California Supreme Court's decision Muzzy Ranch Co. v. Solano County Airport Land Use Comm'n (2007) 41 Cal.4th 372, which found that growth-displacement effects resulting from a restrictive land use regulation is subject to CEQA review.

Specific Comments on the Draft EIR

52-421

Page 1-4: The Draft EIR states that the wye interchange for the Merced to Fresno section is analyzed in the Merced to Fresno Draft EIR. This is not true. The Merced to Fresno Draft EIR half-heartedly mentions impacts related to the Avenue 21 and Avenue 24 wyes, but indicates that ultimately the wye will be chosen based on the anticipated Merced to San Jose EIR/EIS. Moreover, the Draft EIR states that the HSRA will examine wyes in a subsequent project-level EIRs. All of this is textbook project-chopping and piecemealing, masking the overall project's true environmental impacts in violation of CEQA. (See Bozung v. Local Agency Formation Comm'n (1975) 13 Cal.3d 263.)

52-420

Page 3-17: The Draft EIR claims to evaluate the potential loss of traffic lanes parallel to the CalTrain right-of-way along the San Francisco Peninsula, and the loss of traffic lanes along the Oakland to San Jose corridor in the City of Hayward. The Draft EIR does not evaluate, however, how traffic impacts related to this loss of traffic may affect traffic outside the Bay Area and closer to the Merced to Fresno interchange. That analysis should consider, for example, whether travelers will use a different route to reach the Central Valley, and whether those choices will impact traffic closer to the Central Valley alignment.

52-421

Page 5-1: See comment regarding page 1-4 above.

52-422

Page 5-3: The Draft EIR refers to the Draft 2012 Business Plan. This Business Plan was released in November 2011 and purports to represent an implementation strategy for construction of the high-speed rail system. The Business Plan includes a significant amount of new information related to the high-speed train system's phased implementation approach and the "blended system" concept. This constitutes new information of substantial importance, which requires recirculation of the Draft EIR. (Pub. Res. Code Section 21166; 14 Cal.

52-422

Code Regs. Section 15162.) Thus, the Draft EIR must be recirculated to take into account this additional information.

Conclusion

Thank you for the opportunity to submit comments on the Draft EIR. We look forward to your responses to the concerns raised above. We urge you to do this project right rather than continuing to push forward with HSRA's current ill-conceived approach to planning and environmental analysis of the high-speed train system.

Best regards,
Scott Birkey

Scott B. Birkey | Cox, Castle & Nicholson LLP | 555 California Street, Floor 10, San Francisco, California 94104 | direct: 415 262 5162 | fax: 415 392 4250 | sbirkey@coxcastle.com

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Subscription Request/Response :
EIR Comment :
Attorney Comment :
General Viewpoint on Project (BACV) :

Yes
Yes

Response to Submission 52 (Scott B. Birkey, Preserve Our Heritage, February 24, 2012)

52-418

The comment about tiering under CEQA is acknowledged. The Authority does not agree with the commenter's interpretation of CEQA tiering rules. The comment, however, appears to be directed at the Merced to Fresno second-tier, project-level EIR/EIS rather than the content of the Partially Revised Draft Program EIR.

The Authority and the Federal Railroad Administration completed a Final Programmatic EIR/EIS for the Statewide HST system in 2005. This 2005 Programmatic EIR/EIS supported final first-tier decisions on preferred alignments for much of the statewide HST system. The Bay Area to Central Valley Program EIR is intended to support a first-tier decision on how to connect the HST between the Bay Area and Central Valley. The Authority intends to complete its Program EIR process prior to completing its second-tier, project EIR/EIS process for the Merced to Fresno Section.

52-419

The growth inducing impacts of the project as a whole are identified in the 2008 Final Program EIR. This analysis has been challenged in litigation and found adequate in the *Atherton 1* final judgment from 2009.

The discussion in the Partially Revised Draft Program EIR regarding the shift of Monterey Highway and the potential for freight trains to travel on outside tracks of a four-track alignment on the Peninsula will not catalyze growth or impacts from growth in a manner different than already identified in the 2008 Final Program EIR. The shifting of Monterey Highway and the implementation of a four-track alignment on the San Francisco Peninsula will result in some property acquisition, which has already been discussed in the 2010 Revised Final Program EIR. The Authority is committed to minimizing relocations to the extent possible within engineering constraints, and would attempt to obtain sufficient right-of-way within existing public property, undeveloped areas, landscaped areas, or lower intensity commercial development. Specific relocations will be identified and

avoided if possible during the project-level evaluation. Consistent with the information provided in Chapter 5 of the 2008 Final Program EIR, the Authority does not anticipate the displacement of a large number of people from private property who would then relocate to the Central Valley.

52-421

The comment about the Authority's analysis of the east/west alignment and wye for the HST system at the second-tier is acknowledged. The Authority does not agree that its approach to its second-tier EIRs.

52-420

The potential loss of travel lanes along the Peninsula due to the HST project is anticipated to have an extremely localized effect on traffic. The potential loss of capacity may occur on minor collector or arterial roadways whose primary function is to distribute traffic between origins and destinations locally. Even at this level, significant effects to traffic congestion have only been identified at a few intersections and only during peak hours. The major highways and freeways that serve traffic between the Bay Area and the Central Valley would not lose capacity or see increases in congestion, and it is not anticipated that travel patterns to and from the Central Valley would change.

52-422

The Authority disagrees that the Draft 2012 Business Plan triggers further revision and recirculation of the Partially Revised Draft Program EIR. Chapter 5 of the Partially Revised Draft Program EIR discusses the Draft 2012 Business Plan and its implementation strategy for the HST system as a whole. Standard Response 1 provides further information and discussion about the blended system and the way implementing the blended system affects environmental impacts.

Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012)

TRANSDEF 2/21/12 Page 2

Transportation Solutions Defense and Education Fund

P.O. Box 151439 San Rafael, CA 94915 415-331-1982

February 21, 2012
By E-Mail

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Re: Bay Area to Central Valley HST Partially Revised Draft Program EIR Comments

Dear Mr. Mason:

The following comments are offered on behalf of the Transportation Solutions Defense and Education Fund ("TRANSDEF"), the Planning and Conservation League, the Community Coalition on High-Speed Rail and the California Rail Foundation (collectively, "Commenters"). The Partially Revised Draft Program EIR ("PRDPEIR") for the Bay Area to Central Valley High-Speed Train project discloses ten significant and unavoidable impacts (p. 1-5¹) resulting from the implementation of the Pacheco Pass Alternatives--impacts that had not been identified in the 2008 and 2010 Program EIRs. These impacts would not have been identified absent Commenters' litigation. After a review of these newly identified impacts and new information made available since the certification of the 2010 Revised Final Program EIR ("RFPEIR"), it is clear to Commenters that the California High-Speed Rail Authority is obligated under CEQA to study an Altamont Corridor Rail Project San Francisco/San Jose alternative that has not previously been studied, because it would avoid the major impacts of the other network alternatives. The results of that study will then need to be recirculated in a newly revised draft PEIR.

A. Impact Analyses

Noise and Vibration

The screening distance used in the noise analysis is not the screening distance required by the FTA Guidance manual: "375 feet from **track centerline**." (p. 2-2, emphasis added.) The analysis uses a screening distance "measured from the **centerline of the rail corridor**." (p. 2-4, emphasis added.) The analysis should have used a screening distance of 375 feet from the outer track centerline, not the corridor centerline. A correct application of screening distance would study the impacts on the narrow linear strip

¹ All page references are to the PRDPEIR unless otherwise noted.

56-105

adjacent to the area studied. The conclusion on page 2-5 that "the limited expansion of the existing Caltrain rail corridor has little to no effect on the number of properties captured in the screening analysis or to the noise and vibration effects to properties just outside the right-of-way" is thus both conclusory and inadequate. It does not establish that the impact metric, population per mile (Table 2-1, p. 2-2), for this narrow strip is consistent with the adjacent area that was studied. The calculated noise and vibration differences of 0.5 dBA and 2.4 Vdb, respectively (p. 2-5), are unsupported without the inclusion of the underlying technical work. The PRDPEIR had no technical appendices.

56-106

Monterey Highway

As a result of Commenters' litigation, a map is offered showing the locations of lane reductions and right-of-way shifting on Monterey Highway, (Figure 2-2.) Its absence in the 2010 Revised Final Program EIR/EIS (RFPEIR) was one of the reasons that document failed as a full disclosure document for the project. This map is still inadequate, however, as it does not depict the location of the UPRR tracks or provide arrows indicating the direction of the shift.

The litigation also resulted in the disclosure of detailed traffic congestion maps (Figures 3-2 through 3-5.) They indicate that narrowing Monterey Highway will make a highly congested region even more congested. However, by limiting the metric to the unnecessarily broad "LOS E or worse," the maps and analysis fail to address what is perhaps the most important question to the public: will the road network descend into gridlock, experiencing LOS F as a result of the roadway narrowing? The text hints at the answer, but fails to be definitive: "If the peak hour of travel demand is fully occupied, then travelers then shift their time of travel to shoulder hours as a function of time and space." (p. 3-16.) The public needs to know if this project will create more LOS F, which would increase travel times, and make traveling at peak hour even more onerous.

56-107

Peninsula Lane Closures

The analysis of the impact of lane reductions omits the critical information of what capacity would remain after the reductions. (p. 3-6.) It is unclear from the text as to whether the analysis in Tables 3-1a and 3-1b represents the cumulative impact of all the lane reductions, or the impact of each reduction studied separately. It is also unclear from the text whether enough intersections were studied to fully capture the cumulative impacts of traffic diverted onto other local roads. (see footnote 7, p. 3-6.) Commenters' litigation demonstrated this to have been a problem with the previous analysis of the Monterey Highway lane reductions. Also, it is unclear from the text what the cumulative impact would be on a motorist going through more than one impacted intersection. Detailed mapping of the lane reduction vicinities, intersection labeling, and the study of intersections much further away from the roads in question are all necessary to establish the scale of the areas impacted.

To be consistent with the CEQA Significance Criteria identified on page 3.1-3 of the 2008 FPEIR, the analysis needs to evaluate whether the increase in LOS for some of the intersections (e.g., Page Mill Rd./El Camino Real, p. 3-10) exceeds the LOS standard established by the respective county congestion management agencies. The

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56-107 FEIR must do this analysis, or identify each intersection projected to have a higher LOS designation as a result of lane closures as a significant impact. Unless this is done, the analysis will be inadequate under CEQA.

The lane closure analysis produced bizarre and counterintuitive results: some lane closures improved traffic by a whole LOS level, and some intersection delays went to zero (e.g., Whipple Ave./Stafford St., p. 3-9.) In the absence of a detailed explanation as to how this is even possible, these data must be considered invalid as substantial evidence.

The proposed mitigations for the lane closure impacts include the generic suggestion of the adjustment of vertical alignments. Because specific relevant information was developed in the project level environmental review, a list of generic mitigations is not adequate. The proposed mitigations need to be screened for feasibility, based on the existing feasibility analyses contained in documents such as the August 2010 Supplemental Alternatives Analysis Report (see e.g., SARA 413 & 417).

Construction Impacts
It appears that the new Section C, focused on Monterey Highway (p. 4-4), was initially written with the intent of supplementing the 2008 FPEIR. A later decision to delete the entire Section C (p. 4-5) failed to fully coordinate the texts. Some of the typical generic impacts (e.g., handling of waste pavement) were left out of the new Section C.

B. New Information and Changed Conditions

Ridership Peer Review Group Reports
Sections 4.3, 4.4, and 4.5 of the July 2011 Independent Peer Review Final Report of the California High-Speed Rail Ridership and Revenue Forecasting Process confirm the criticisms of the ridership model that were raised in Commenters' letters on the RFPEIR. (attachment 1.) The August 2011 Peer Review Final Report (attachment 2) states on page 6 that "We continue to believe that a better solution would have been to fully re-estimate the model in ways described in our first report." On page 7, the report states "That said, we still believe that every effort should be made to eliminate the use of such a large set of constants in future versions of the model. They represent current travel patterns that may not hold true under future conditions." It appears that the Peer Review Group grudgingly accepted the explanations and conclusions offered by Cambridge Systematics, with obvious misgivings. This doesn't change the opinion of the Institute for Transportation Studies that the model's results are unreliable for public investment purposes. (see *infra*.)

56-108

56-109

56-110 Project Section Profile Variations
As demonstrated in the August 2010 Supplemental Alternatives Analysis Report (e.g., SARA 413 & 417), for some subsections of the Peninsula portion of the project, no vertical alternatives other than aerial viaduct appear feasible. If it is known that no other way to build a subsection is possible, the impacts of that vertical alignment need to be studied at the program level. The Authority appears to argue that the SAA report is only

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56-110 preliminary. If so, what additional studies are needed to solidify the analysis and clarify whether other vertical alignments are feasible? Why can't such studies be done now? Deferring such analysis to the project level deprives the program level selection of a preferred alternative of vital impact information. This is why it is untrue that "[t]his type of design detail [horizontal placement and profile variations] is appropriately considered in second-tier, project-level environmental documents because it does not prevent adequate identification of the impacts of the programmatic decision at hand." (p. 5-1, emphasis added.) It is equally untrue that "[n]o decision will be made at the program level regarding how to accomplish grade separations or whether to close certain roads." (p. 5-9.) One might argue that an infeasibility determination is not the same as a "decision," but that would be semantics--a distinction without a difference.

56-111 Altamont Corridor Rail Project
The conclusion that "the information related to the Altamont Corridor Rail Project does not necessitate further revision of the Program EIR" (p. 5-3) is deeply flawed. In fact, the 2011 Altamont Corridor Rail Project's Preliminary Alternatives Analysis shows that an Altamont Corridor Rail Project route (with appropriate adjustments) would be far more consistent with the project's adopted objectives listed in Table 6-1 (p. 6-5) than the PRDPEIR's Preferred Alternative.

The compilation of public input on the selection of the preferred alternative (starting on p. 6-6) depicts a highly controversial decision--one for which there is no public consensus. A careful analysis of the public input yields four major environmental objections to the various Network Alternatives: 1). impacts on the Don Edwards Wildlife Refuge; 2). impacts on the Grasslands Ecological Area; 3). impacts on Peninsula communities; 4). sprawl inducement.

The 2011 Altamont Corridor Rail Project Preliminary Alternatives Analysis ("PAA") demonstrates that feasible Altamont alternatives exist that avoid each of these impacts, when combined with a blended approach (see discussion, *infra*) that would eliminate the four-track cross-section throughout the Caltrain Corridor. Westbound Altamont trains would reverse direction while loading in the San Jose Terminus, and head to San Francisco on the Caltrain Corridor. (While this extension of service to San Francisco would represent an expansion of the Altamont Corridor Rail Project operational plan, the additional rail infrastructure would be limited to the blended approach) already being considered for the Caltrain Corridor.

The Altamont Corridor Rail Project alternatives that were recommended to be carried forward into the EIR/EIS process met all the following criteria:

- Alternative meets the project goals and objectives and project purpose and need in providing an improved and competitive regional intercity and commuter passenger rail service that maximizes intermodal connections between the Northern San Joaquin Valley

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and Bay Area and that complements the high speed train system.

- Alternative has no environmental or engineering issues that would make approvals infeasible.
- Alternative is feasible or practical to construct.
- Alternative reduces or avoids adverse environmental impacts. (PAA, p. 2-7)

Ms. Alexis's comment letter (RFPEIR, p. 15-42) points out how the ridership model projects that the Pacheco route gains 13.9 million riders when a San Francisco destination is added to a San Jose-only network alternative. It would then be entirely logical to add that same number of riders to the 94.6 million riders projected for an Altamont route with a San Jose terminus, to create a 108.5 million rider estimate for an Altamont Corridor Rail Project San Francisco/San Jose alternative. This calculation shows an Altamont Corridor Rail Project San Francisco/San Jose alternative exceeding the Preferred Alternative by 14.6 million annual riders, a 15.5% increase in ridership. This analysis remains uncontroverted, as the Authority did not honor Ms. Alexis' request to run the model with this alternative.

This increase in ridership will have a significant positive impact on HST revenues, as the Bay Area's boardings are estimated to make up 35% of the system's 2030 boardings for a San Jose-San Fernando Bay to Basin Scenario. (California High-Speed Rail 2012 Business Plan, Ridership and Revenue Forecasting, draft technical memorandum, Table 5.14.) The outstanding performance of this alternative stands in sharp contrast to one of the PRDPEIR's key conclusions "that both Pacheco Pass and Altamont Pass alternatives have high ridership potential and that ridership and revenue do not differentiate between these alternatives." (p. 6-17.)

By bringing all trains to San Jose, this Altamont Corridor Rail Project San Francisco/San Jose alternative avoids the criticism that "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 total capacity of the system to these markets." (p. 6-21.)

"The preliminary AA report evaluation confirms that a regional and inter-city commuter rail route is feasible for travel through the Altamont Corridor." (Id., p. 5-9.) The Alameda Corridor will be able to support HST equipment:

In addition, once improved to be fully grade-separated and electrified, with appropriate signaling and train control systems, the Altamont Corridor could support operation of California HST System trains and lightweight multiple-unit passenger equipment compatible with those trains. As such, the Altamont Corridor could allow selected California HST

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56-111 | System trains to serve regional stops within the Altamont Corridor and to allow regional trains operating within the Altamont Corridor to reach additional destinations within the California HST System (e.g., Sacramento or Merced). (Id., p. 2-3.)

56-112 | The question then becomes, could the Altamont Corridor Rail Project be analyzed as an HSR network alternative? The PRDPEIR, without foundation, says no. It characterizes the Altamont Corridor Rail Project as "a substantially slower commuter/intercity rail service that does not meet the design requirements for a high-speed train network alternative." (p. 6-18.) Clearly, that condition resulted from the design brief given to the project team. There is no evidence in previous FPEIRs that there are any speed-limiting factors specific to the Altamont Corridor. On the contrary, the Altamont Corridor Rail Project "is being designed to 150 mph (rural) speeds." (Id., p. 3-36.) Although the route will "have an average speed of 70- to 90- mph (including stops)" (Id., p. 2-7), there is not enough information available to the public to be able to estimate the travel time involved in an express HST trip from Los Angeles to San Francisco on any of the alignment alternatives for this route. A study of this alternative is needed to prepare a proper travel time estimate.

The Network Alternatives report (using routes that are allegedly different from the Altamont Corridor Rail Project alignment alternatives) showed an LA-SJ time of 2:19 for an Altamont San Jose Terminus alternative (FPEIR, p. 7-18), which is ten minutes longer than the Pacheco LA-SJ time. (Id., p. 7-48.) If the Altamont Corridor Rail Project were able to attain the express speeds of the Altamont network alternatives, that would result in an LA-SF time of 2:48, ten minutes longer than the Pacheco LA-SF time of 2:38. (Id.) There is not enough information available to the public to be able to compare the operational speeds of the network alternatives and the Altamont Corridor Rail Project alignment alternatives. Because of the alternatives' potential to greatly reduce the project's environmental impacts, careful study of the potential to increase operational speeds is needed.

56-113 | To help meet the Proposition 1A requirement of a 2:40 LA-SF trip time, a wye from either of alternatives EB-4 or EB-6 could be installed near Santa Clara to allow San Francisco express trains to turn north there. (See map, PAA, p. 3-16.) This would save the several minutes the short trip to San Jose would take, along with its respective dwell and turnaround times. If the travel time estimate was still more than 2:40, a speed optimization effort should be made, to see where higher express speeds can be achieved.

56-114 | The key difference between the Altamont Pass Network Alternatives that were previously studied and the Altamont Corridor Rail Project alignment alternatives is the avoidance of the Don Edwards Wildlife Refuge. In addition, it is Commenters' understanding that the Altamont Corridor Rail Project alternatives were designed to avoid the riparian and property impacts cited in the FPEIR at pp. 7-19 & -20 in the Niles

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56-114 Canyon/Sunol Valley. Before criticizing these alternatives for impacts they don't have², a detailed study of the route design in the Niles Canyon/Sunol Valley area is needed.

56-115 With two lawsuits directly challenging the Authority's failure to adequately plan the Pacheco route in light of the UPRR's refusal to share its right-of-way, it is bizarre to read that "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." (p. 6-18.) No evidence was offered to substantiate this assertion, nor were any citations to previous EIRs offered. This statement would appear to not apply to the alternatives being studied by the Altamont Corridor Rail Project, as the very first goal of the Project is to "[d]evelop a regional intercity and commuter passenger rail service in the Altamont Corridor linking the northern San Joaquin Valley with the Bay Area that provides dedicated trackage separate from existing lines shared with Class 1 freight operations where feasible." (2011 Altamont Corridor Rail Project Preliminary Alternatives Analysis, p. 2-1.) At a minimum, the Setec Alternative, proposed by Commenters, captured in part by Altamont Corridor Rail Project alternatives EBWS-1, TV-4, and ALT-2, was professionally designed to avoid UPRR rights-of-way.

An Altamont Corridor Rail Project route would also eliminate the ten new significant and unavoidable impacts identified in this PRDPEIR, each which was Pacheco-related. Because such a route, in combination with the blended system approach, would eliminate the most serious environmental impacts of any network alternative studied to date, it must be studied as an alternative, after which a further revised draft must be recirculated, prior to selecting a preferred alternative. That study would, of course, investigate whether an Altamont Corridor Rail Project can meet the HSR design requirements. Because the study will mostly involve compiling and analyzing already existing information, it should not be onerous or time-consuming.

Because the CHSRA's Chair is a former BART director, it might now be feasible for the Authority to negotiate with BART to take over its Dublin line and regauge it for HSR and HSR-compatible regional service. (See Commenters' scoping comments for the Altamont Corridor Rail Project, attachment 3.) That would greatly reduce the environmental and community impacts of building new transportation infrastructure in the Tri-Valley, while better connecting the Valley with San Joaquin County, where many of its employees live. Livermore would receive an excellent rail connection, and avoid the uncertainty of waiting for the funding of an eventual BART extension. If such a route were implemented, the impacts would be strikingly lower, invalidating the assertion that "[t]he 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

² The RFPEIR criticized Commenters' Setec Alternative as appearing to have the same impacts to high value aquatic resources and threatened and endangered species as the FPEIR's SR-84/South of Livermore alternative (RFPEIR, p. 15-208 - 209), despite the statement within the Setec report that "[t]his new proposed Altamont alternative entirely avoids Niles Canyon and sensitive Sunol Creek areas." (RFPEIR, p. 15-110.)

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56-115 highway right-of-way as a method of minimizing environmental and community impacts." (p. 6-22.) Such an alignment should be included when studying an Altamont Corridor Rail Project alternative.

56-116 The Draft Business Plan Proposes A New Project Alternative
 The Draft Business Plan (released November 2011) introduces the key new concepts of a blended system and blended operations: "Blended services linking statewide high-speed rail service with regional and local transit systems will benefit travelers in the near term and provide the platform for continued improvement in rail transportation. Connectivity and mobility will improve significantly across the state by expanding the network of interconnected public transportation systems and can be expedited through early investments in the regional systems." (Draft Business Plan, p. 2-1.) "As further improvements are made, blended operations progress to the point where transfers would not be necessary, and passengers could have a "one-seat ride" on a train that is able to travel over both the high-speed line and upgraded regional rail lines." (*Id.*, p. 2-3.)

The Business Plan is explicit in identifying two pathways to implement the Phase 1 HST project:

Step 4: San Francisco to Los Angeles/Anaheim (Phase 1)
 Completion of the Bay to Basin system leads to Phase 1, the connection between San Francisco and Los Angeles/Anaheim. This 520-mile connection can be accomplished in two ways:

- Through a coordinated "blended system" that uses upgraded commuter rail systems to connect the metropolitan areas with the inter-regional high-speed system, and
- By expanding fully dedicated high-speed infrastructure to San Francisco and Los Angeles/Anaheim. (*Id.*, p. 2-17.)

56-117 Despite the Authority's recognition of the blended system as "an additional phasing option for the urbanized sections that have existing commuter rail corridors" (p. 5-4), the PRDPEIR fails to treat the concept as a Project Alternative. The entire impact analysis is limited to this cursory statement: "...the blended system concept does not appear to distinguish among network alternatives." Failure to treat the blended system under *Laurel Heights II* as significant new information proposing a lower-impact project makes this PRDPEIR inadequate under CEQA. This treatment is inconsistent with the Draft Business Plan, which clearly contemplates a different approach to environmental review than was taken both in the current PRDPEIR and in the previous RFPEIR:

This infrastructure will require some upgrades to accommodate high-speed operations and added capacity with speeds through urban areas of up to 125 miles per hour. However, such improvements can likely be accomplished while staying substantially within the existing rights-of-way,

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56-117

resulting in substantially reduced impacts to the communities along the corridor.

Based on this approach, initial environmental reviews can focus primarily on the impacts of limited upgrades to the existing facilities, thus avoiding the mitigation requirements associated with an expanded dedicated high-speed system. Sharing existing commuter rail facilities in urban areas will not only materially reduce the environmental impacts of the planned full system, but will result in substantial cost savings as well. Recognizing that the ultimate goal for the voter-approved program is fully operational high-speed rail service between the two end points included as Phase 1 of the system, any expansion in the corridor to add additional capacity, accommodate dedicated tracks, significant structure or tunnel work, and additional right-of-way beyond what is defined in the blended system would have to be revisited through future environmental reviews. Investigations show that the coordinated blended solutions as envisioned can accommodate service levels for many years into the future. (Id., p. 2-18, emphasis added.)

This divergence in approach is captured in the proposal by Senator Simitan, Congresswoman Eshoo and Assemblyman Gordon (the SEG Plan, attachment 4), which should have been evaluated by this PRDPEIR as new information suggesting a lower-impact project alternative, but was not. That plan conveys grave concerns about the long-term impacts on the Peninsula of a certified EIR for the full buildout of the HST system, since such a system cannot be built within a reasonable period of time, and because such a high-capacity system might be unnecessary for the level of ridership expected. The SEG Plan noted the lower impacts of a blended system, and urged that the environmental review of the phased implementation of the full buildout of the system be stopped.

56-118

The on-going concern about the reliability of the RPFEIR's ridership numbers, as expressed by the Institute for Transportation Studies (SAR 9003), makes it unclear as to whether a full-build system is even needed in the foreseeable future. "These [very large error] bounds, which were not quantified by CS, may be large enough to include the possibility that the California HSR may achieve healthy profits and the possibility that it may incur significant revenue shortfalls." (SAR 9006.) It is clear that the blended system approach offers a much lower cost (p. 5-4), lower impact (p. 5-9) pathway forward—one that greatly reduces the project's risk. From the standpoint of the public funds at risk, it would be highly irresponsible to not study a blended system alternative.

56-119

Commenters assert that the blended system, as described in the SEG Plan, and in accordance with the language of the Draft Business Plan, must be studied as a new

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56-119

alternative in a recirculation of the PRDPEIR. A blended system would mean an earlier project delivery, substantially lower costs and lower environmental impacts. It is conceptually distinct from a phased implementation of the full buildout project, in that urban areas would be excepted from the HST Engineering Criteria (FPEIR, p. 2-8) which require a fully grade-separated access-controlled right-of-way. This would be entirely consistent, however, with the shared-use corridor general criteria (FPEIR, p. 2-9), the project's Purpose (FPEIR, p. 1-4), as well as its Description:

A fully grade-separated, access-controlled right-of-way would be constructed, except where the system would be able to share tracks at lower speeds with other compatible passenger rail services. Shared-track operations would use existing rail infrastructure in areas where construction of new separate HST facilities would not be feasible. Although shared service would reduce the flexibility and capacity of HST service because of the need to coordinate schedules, it would also result in fewer environmental impacts and a lower construction cost. (FPEIR, p. 2-2.)

Rather than merely delaying the impacts of a phased approach to building a four-track alignment (p. 5-9), a blended approach would eliminate those impacts for the foreseeable future. A 2011 Caltrain study concluded that a blended system is potentially feasible. (attachments 5 & 6.) The implementation of quiet zones should be added to the study of a blended system alternative, resulting in capturing most of the noise reduction benefits of a full-build alternative.

56-121

There is no analysis of the impact of blended operations on ridership, despite the obvious impact of transfers on waiting time and impedance. There is no analysis of the impact of either blended operations or phasing on the economic feasibility of the project. An EIR is required to consider and study a reasonable range of feasible alternatives, particularly alternatives that might significantly reduce project impacts. Given the much lower environmental impact of an Altamont Corridor Rail Project alternative, it is imperative that its ridership be assessed to determine if it constitutes an economically feasible alternative that should be considered and studied in depth, as the project cannot access Proposition 1A Bond funds unless it is projected to generate an operating profit.

56-122

Deferred Ridership Impact Analysis

The Court has already ruled that deferral of the study of impacts resulting from program-level decisions is not permitted under CEQA. The PRDPEIR impermissibly defers a full analysis of the phased implementation proposed in the Draft Business Plan until the project-level review:

"The longer duration of construction and also lower ridership forecasts may result in differences in the environmental impacts and benefits as described in the 2008 Final Program

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56-122 EIR, the 2010 Revised Final Program EIR, and in this document. This discussion provides a qualitative, general assessment of these differences. The environmental consequences of phased implementation would be explored in more detail as part of second-tier, project level EIRs.” (p. 5-4.)

The PRDPEIR’s impact analyses have not been redone using the conservative ridership estimates published in the Draft Business Plan. The impact assessments, including the benefit assessments, may thus be quite overstated. While this does not necessarily violate CEQA, it does raise questions as to whether the balance of costs and benefits for a Phased Implementation approach fundamentally alters the desirability of this publicly funded project. This question must be answered at the program level.

Mitigation of Temporary Northern Altamont Terminus Station
 The mitigations proposed for newly identified significant impacts on a temporary northern terminus for the Altamont route may be inadequate for a Union City terminus. BART trains have a maximum length, based on the size of station platforms. It is not possible to simply add more train cars, as suggested on p. 5-8. It is also questionable as to whether the BART system is able run more frequent service, given the headway limitations of its existing automation system. Instead of Union City, a Bay to Basin Altamont route would need to go all the way to Santa Clara or San Jose, where it could connect with the more flexible Caltrain system. This would be preferable for the passengers, as the largest number of them are traveling to Silicon Valley, and especially North San Jose. (2011 Altamont Corridor Rail Project Preliminary Alternatives Analysis, p. 2-6).

Preferred Alternative
 Especially if an Altamont Corridor Rail Project alternative is to be considered, the justification listed on p. 6-2 for choosing a Pacheco alignment can no longer be considered valid. One of the four stated criteria (Impacts on wetlands, waterbodies, and the environment) would clearly favor an Altamont Corridor Rail Project San Francisco/San Jose alternative, which wouldn’t have any major wetlands or waterbody impacts, unlike Pacheco. One of the criteria (Best utilizes the Caltrain Corridor) would equally favor either alternative. One of the criteria (Political support) is not an environmental criterion, and is neither relevant nor appropriate for selecting a preferred alternative based on feasibility and environmental factors. Indeed, the new Chair of the Authority’s Board of Directors has publicly admitted³ that the Authority’s earlier choice of the Pacheco alignment based on political criteria was ill-advised. And there is evidence in the record (RFPEIR, p. 15-42) that the final criterion--the best connection between Northern and Southern California--favors an Altamont Corridor Rail Project alternative, as it would likely have 15.5% more annual riders. (see discussion, *supra*.)

³ Statement made by Mr. Dan Richard during a presentation at the January 2012 Planning and Conservation League Annual Symposium.

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56-124 A more appropriate selection process for a preferred alternative would be to compare how the alternatives meet “[f]urther 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.” (p. 6-11.) An Altamont Corridor Rail Project San Francisco/San Jose alternative would have the following advantages:

1. It would pass through North San Jose, close enough for a shuttle to SJO.
2. It would pass near SFO, where it might be possible to connect it to the AirTrain.
3. It would offer a less costly and easier future connection to OAK and Oakland.
4. It relieves major interregional capacity constraints on I-80 and I-580.
5. It avoids the environmental impacts identified for other alternatives.
6. It would have significantly higher ridership and revenue.
7. It would serve both statewide and regional travel markets with one rail investment.
8. It could avoid the cost of a BART extension to Livermore.

56-125 PRDPEIR Section 6.2 fails to mention that each of the clarified and revised impacts has been identified not only as significant but also as unavoidable. The absence of any discussion of this very important change since the 2010 RFPEIR nullifies the statement that “These clarified and additional impacts along the Monterey Highway and in certain portions of the San Francisco Peninsula have been carefully considered in reevaluating the preferred alternative recommendation.” (p. 6-3.) The selection of the Preferred Alternative must be conducted in the explicit context of the newly identified unavoidable impacts.

Conclusion
 The PRDPEIR improperly fails to take into account significant new information that shows that there exists a previously-unstudied feasible alternative, using the Altamont Rail Corridor alignment, that would significantly reduce the impacts associated with the previously-chosen Pacheco Pass alignment. Under *Laurel Heights II*, CHSRA must study the Altamont Corridor Rail Project San Francisco/San Jose alternative and recirculate. CEQA requires the lead agency to select the project alternative with the fewest environmental impacts.

56-126

56-127 Commenters would like to see a successful HSR system in operation. They are convinced that the blended approach, coupled with an Altamont Corridor Rail Project San Francisco/San Jose alternative, would result in higher ridership, higher community support, lower cost, and faster delivery than the PRDPEIR’s Preferred Alternative. They appreciate this opportunity to comment on this important document.

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Sincerely,

David Schonbrunn, President
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Planning and Conservation League

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cc: Stuart Flashman, Esq.

Attachments

Peer Review Group July Report
Peer Review Group August Report
Commenters' Scoping Comments
SEG Plan
Caltrain Capacity Analysis Update
Caltrain Draft Blended Operations Analysis

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012)

FINAL REPORT

Attachment 1

Independent Peer Review of the California High-Speed
Rail Ridership and Revenue Forecasting Process

Findings and Recommendations from the January-March, 2011 Review Period

July 22, 2011

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

The California High Speed Rail Authority (HSRA) convened an independent peer review of the ridership and revenue forecasting process and outcomes. Reporting to the Executive Director, the Panel is charged with providing a comprehensive in-depth review of the models used to estimate ridership and revenue and the forecasts derived from them. The Panel held its first meeting at the Authority offices in Sacramento on Monday and Tuesday, January 10-11, 2011. This report summarizes the key issues, findings, and recommendations of the Panel.

The Panel consists of five members:

- Frank Koppelman, PhD, Professor Emeritus of Civil Engineering, Northwestern University (chair)
- Kay W. Axhausen, Dr.Ing., Professor, Institute for Transport Planning and Systems, ETH Zurich (Swiss Federal Institute of Technology Zurich)
- Billy Charlton, San Francisco County Transportation Authority
- Eric Miller, PhD, Professor, Department of Civil Engineering and Director, Cities Centre, University of Toronto
- Kenneth A. Small, PhD., Professor Emeritus, Department of Economics, University of California-Irvine

Rick Donnelly, PhD, AICP of Parsons Brinckerhoff served as facilitator and recorder of the meeting. In this capacity he serves at the convenience of the chair rather than as member of the project management consultant team.

The Panel has based their comments and recommendations upon a review of a large number of reports and information generated by Cambridge Systematics, Inc. (CS), the developers of the model, as well as resulting forecasts developed for the Authority. These reports are identified in the Appendix to this report. Several panelists also reviewed the recent critique of the model and forecasts by the Institute of Transportation Studies (Brownstone et al. 2010) and subsequent correspondence about it. That critique provided additional insight into the forecasts and the controversies surrounding them, but did not frame the Panel's deliberations.

The views expressed in this report are consensus findings reached through a high degree of agreement and common thinking among the panelists.

Overall the Panel was impressed with many aspects of the work on ridership and revenue forecasting completed to date on the project. The approach undertaken by CS was ambitious, it represented a significant improvement in practice in several respects (for example, through the development and linkage of a complex set of advanced models), and it demonstrated commendable openness. However, there are important technical deficiencies in the model and the documentation thereof. The purpose of this report is to provide a critical review of the models and associated forecasts, focusing on those aspects that are questionable or deserving of more work.

1

1 Charge to the Panel

Roelof van Ark, Executive Director of the Authority, opened the meeting by welcoming the Panel, introducing them to the project, and outlining his charge to its members. A relative newcomer to the project, his near-term priority is to strengthen the organization with top-notch, committed professionals. He is also committed to increased accountability and transparency in their work, including all aspects of the ridership and revenue forecasting. His goal is to address differences in a professional manner, using open and honest dialogue. This is one of four independent review panels serving the Authority. Like the others, this Panel will report directly to the Executive Director.

The Panel's work to date has looked at the system as a whole. Ultimately the Panel's reviews are expected to assist the Authority's need for technical support in completing an update to the business plan, and investment and risk analyses. It is the Panel's understanding that the model was not designed to support the analysis of the Minimal Operable Section (MOS) and associated detailed analyses. Mr. van Ark noted the controversy to date with the forecasts and underlying models, which in part motivated the formation of this Panel. However, the purpose of this Panel is not to further debate those controversies. Rather, the Authority is highly interested in the advice of this Panel about where to go next in their forecasting efforts, based upon the progress and capabilities to date. In addition to conducting more detailed analyses, the Authority requires the capability to assess public-private financing schemes and station area developments. It also desires to not waste taxpayer money on unnecessary and unproductive modeling and data collection.

2 Understanding of the current forecasting process

CS was hired by the Metropolitan Transportation Commission (MTC) in 2004 to develop a statewide multi-modal travel demand model to help evaluate alignments for segments of the high-speed rail (HSR) network. The model relied on trip tables and adapted mode choice models of existing travel demand models to forecast intra-regional travel in the two largest metropolitan areas to be served by HSR – namely, San Francisco (the MTC model) and Los Angeles (the SCAG model). In addition, a population-based estimate of intra-regional travel was used for forecasting HSR trips within San Diego. The intra-regional mode choice models are traditional nested logit models, with the top-level choice being that between motorized and non-motorized modes. HSR was added to the transit nest in each instance.

For inter-regional travel, a four step sequential model was developed that included trip frequency, destination choice, mode choice, and assignment components. The inter-regional mode choice model included a primary mode choice (car, rail, HSR, or air) and then a choice of access/egress modes. Trips by mode from the intra-regional and inter-regional models, along with intra-regional auto trips estimated from the Caltrans Statewide model, were aggregated prior to the assignment step.

The data used to estimate the inter-regional models was compiled from several sources. The main source was a stated preference survey that was conducted at airports, rail stations and by telephone from August to November of 2005. On-board surveys were conducted on the Altamont Commuter Express and the Metrolink trains in October and November of 2005. Telephone sur-

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veys of Amtrak passengers from the Capitol Corridor, the Pacific Sunliner, and the San Joaquin services were conducted during the same time frame. Air passenger surveys were done at six California airports (Sacramento, San Jose, San Francisco, Fresno, Oakland and San Diego) between August and November 2005. Unfortunately, surveying was not allowed at airports in the Los Angeles area. An effort was made to represent travel in and out of the LA area by over-sampling flights to these airports from surveyed airports. Finally, a random-digit-dialing telephone survey was conducted to capture auto trips in the San Diego, Los Angeles, Bakersfield, Tulare County, Fresno, Merced, San Francisco Bay Area, Modesto/Stockton, and Sacramento regions in August 2005. Overall, surveys from 3,172 respondents were collected during the study (1,234 air, 249 rail on-board, 181 rail telephone, and 1,508 auto).

The other primary data source for model development was the Caltrans Household Survey, conducted in 2000-2001. This was an activity-based survey that collected information from 17,040 households in all 58 counties in California. In addition, several surveys were used for model calibration (i.e., adjustment of various alternative-specific coefficients) to match known aggregate properties of travel patterns. For validation, checks of model predictions against additional known aggregate properties of travel patterns were evaluated. The main data sources for calibration and validation of the inter-regional models were the 1995 American Travel Survey, 2000 Census Transportation Planning Package, USDOT 10% air passenger ticket sample data for 2000, rail passenger data from California rail operators, Caltrans Household Survey, and traffic counts obtained from the Caltrans traffic count database. The intra-regional models were not calibrated and validated by CSI because they were assumed to have been calibrated and validated by the local agencies. The 2000 highway assignment validation results were summarized by facility type, area type, region and gateway. All highway summaries were reported to be within three percent of observed data.

The inter-regional model was finalized in February 2007. In 2008, the SCAG intra-regional models were refined, and in 2010 some changes were made to fix anomalies in the MTC models. During the same time, detailed travel forecasts under a no-build scenario (i.e., without HSR) were developed for 2030 using the model, and 2035 forecasts were developed by factoring up the 2030 results.

In addition, the model was used to analyze four main sets of scenarios including an HSR system as currently planned by the HSRA, either for Phase I or for the full system:

- Baseline assumptions plus various air and HSR fare structures and auto-operating costs; these resulted in figures used in the 2008 business plan;
- One of the fare structures analyzed in the initial set of scenarios (set 1 above) plus an 8% assumed increase in air and auto costs and a revised service plan;
- Assumptions of the second set of scenarios, but with an increase in the assumed parking costs at HSR stations;
- Assumptions of the third set of scenarios, but using the revised rather than original SCAG and MTC intra-regional models. This fourth set of assumptions was used in the EIR/EIS overall forecast of riders and revenue.

Overall the model responded reasonably, with ridership and revenue being affected by changes in fare price, parking costs and levels of service. All of the original model development and some of its early application were performed under the MTC contract, which was completed in September 2008. A small amount of model application work for the HSRA, contracted by the Parsons Transportation Group, was also completed in parallel with the MTC contract. CSI has served the HSRA since September 2008 through the program management contract held by PB Americas, Inc. During this time some model refinement was carried out, as well as further development and interpretation of forecasts.

3 Incomplete documentation

The Panel found several instances of incomplete or outdated information in the documentation, or could not locate such if it did exist. Two major areas were identified as key omissions that should be addressed quickly. It is expected that these information are readily available to the model developers, or can be quickly summarized from their work completed to date.

3.1 Inputs to model application

The assumptions about, data development, and summaries of several key inputs to the model should be documented. We could find little or no discussion of these inputs and their underlying assumptions:

- Fare levels or structure
- Levels of highway and airport congestion
- Levels of service (train frequency)
- Levels of ridership and service on competing intercity bus services
- Fuel prices (sensitivity tests on auto operating cost assumptions are advised)
- Induced effects
- Competitive responses from other modes (sensitivity tests of both reduced fares and varied levels of service). These include especially the airline industry, but also "curbside" express intercity bus services that have grown rapidly in the last decade in the Eastern and Midwestern United States.
- Socioeconomic and land use forecast inputs

The level of service topic is particularly important to tie to operating and business assumptions made by the Authority, and should be attributed as such. For example, the frequencies in San Francisco (8 million residents) in full build-out of 12 trains per hour are comparable to Tokyo, with 30 million residents). The Panel questioned whether such assumptions are realistic, and what the effect of lower levels of service (decreased frequency) on ridership would be. These issues should be clearly addressed in the documentation.

3.2 Validation and documentation

There appeared to be considerable confusion between estimation, calibration, and validation in the documentation. While this is not unique to these reports, we feel that the following definitions are widely accepted and should be used in both the revision of current documentation and in all future work:

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- *Model estimation* is the inference of model form and parameters from survey data and the related statistical testing of those parameters as well as of alternative model formulations (i.e. specifications).
- *Model calibration* is the adjustment of the completed model system, mainly through changes in alternative-specific constants, so that its predictions match specific targets generated from observed data (including the data used in estimation).
- *Model validation* is the testing, and perhaps further adjustment, of the model system using data other than (and usually newer than) the data from which it was estimated.

There is no evidence that model validation defined in this manner was carried out. Rather, elements of the model were estimated using travel survey data collected in 2005. The resulting model was calibrated to observed data from the year 2000. Moreover, the targets used in calibration appear to reflect essentially the same information as that used in estimation.

A more thorough descriptive analysis and interpretation of the data used to build the model would have been helpful for our analyses. Some of the analyses needed before the Panel can complete our review of the current model include:

For the calibration year only

- Maps, graphs, and tabular summaries of statistical measures of the deviation between assignment results and observed modal flows (road, air, rail)
- Tabular summaries of comparison of assigned versus observed screen line volumes

For both calibration and forecast years

- Overall mode shares by origin-destination distance
- Mode shares by income
- Tables and maps of long distance trips per day by person type (income, region of residence, etc.) and trip purpose
- Summary of income elasticities by mode

For forecast years only

- Mode shares by network distance from HSR stations (distinguished among HSR stations with different access modes)
- Tables of own- and cross-elasticities by mode for the time and cost variables across the state, by origin-destination distance or inter-regional pairs, by income group and distance band from the HSR stations
- A brief assessment of access and egress mode shares (and parking demand in particular) detailed appropriately by HSR station
- Analysis of the effects on forecasts of expert judgments that were made to override estimated model coefficients

As a further check on model validity, it would be useful to compare key results with what has been observed in other systems, as discussed earlier. Such external comparisons have the advantage of implicitly incorporating various practical considerations that cannot easily be included in a mathematical model. These include operational problems, cutbacks due to inadequate funding, unanticipated responses of competitive suppliers, and feedback effects from a project on

local employment. Flyvbjerg et al. (2007) suggest a somewhat formal process for such comparisons called reference class forecasting that is commended for consideration. A similar but less formal approach would be to identify a few relevant case studies for comparison. In either case, when results differ, much can be learned from examining the reasons. The hope here is to avoid the types of systematic over-estimates of demand that Flyvbjerg et al. identified in other large rail projects around the world.

Yet another check would be to compare the assumed characteristics of air service with what has developed in other places when HSR service is introduced. The model assumes a rather passive response by air carriers, but the history of U.S. air deregulation suggests that air carriers in fact react strongly to changes in their competitive environment. Evidence from other places where HSR has been introduced, as well as from the extensive theoretical and empirical literature on the airline industry, will help assess the likelihood of drastic changes in air carrier pricing and service. Such changes might include price wars on the one hand or complete abandonment of the market by airlines on the other. Either outcome could have drastic impacts on HSR ridership and revenue. The research literature has begun to develop models specifically designed to analyze how the airline industry would respond to the introduction of HSR services (e.g., Adler et al. 2010).

4 Short term issues

The Panel has significant concerns about the model formulation, primarily with respect to specification that should have been addressed during previous work. Pending improvements to the model, we recommend that any use of the model include some steps to make the demand forecasts more conservative, especially in forecasts for financial (investment and risk) analysis.

4.1 Representation of distance in destination and mode choice models

The current model classifies travel further than 100 miles as long distance trips. This demarcation seems reasonable, especially given that a similar definition was used in the 1995 American Traveler Survey, which was an important source of such information at the time this model was developed. The choice of an ultimately arbitrary division of the travel market into two distance segments, however well justified, might lead to discontinuities between them. The CSI models report should show explicitly that this is not a problem. Otherwise, CSI should consider joint models in which distance is entered in a non-linear manner (e.g., a Box-Cox transformation) and as part of suitable interaction terms. Such non-linear formulations are moderately more difficult to estimate, but can be estimated using several off-the-shelf software packages and common languages including Biogeme, ALOGIT, and Gauss.

A second issue of concern to the Panel is the non-monotonic nature of the cubic functions of distance specified for some trip purposes. We recommend that a Box-Cox transform be adopted to ensure that the distance function is monotonic. This would reduce the number of estimated parameters by one, and it appears it would make only a small difference in goodness of fit based upon our inspection of the estimated curves.

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4.2 Observed heterogeneity

Observed heterogeneity in the mode choice models was apparently not investigated with respect to trip-makers' preferences for specific modes or differential sensitivity to different level of service measures. These and other interaction terms that might normally be expected in such models are missing in this one. Interactions between socioeconomic variables (income, etc.) and time/cost variables should be included in the model. The effect of such variables is to account for heterogeneity in traveler response (i.e., for variation across the population of travelers in how various service characteristics are evaluated). Such heterogeneity has been found in virtually every study that has looked for it, and in some cases detailed results turn out quite different when it is included. The Panel found no evidence that these results are biased in aggregate or that any differences are in a particular direction as a consequence, but believes it is a relatively simple improvement that will make the model more reliable. This is also a near-term high priority item.

4.3 Inadequate exploration of level of service variables

The Panel found no evidence that alternative representations of level of service variables were investigated, which is important to obtaining a good behavioral representation and sensitivity to changes in service. Examples of such alternative specifications include:

- Replacing the simple headway variable by its inverse (frequency of service) or some other non-linear transformation;
- Dividing the cost variable by some function of income, in order to represent the well-established tendency of higher income travelers to exhibit less sensitivity to cost; and
- Dividing out-of-vehicle time by some function of overall travel distance, in order to represent the reduced importance of out-of-vehicle time with increasing trip length.

It is essential that the model be appropriately sensitive, as one of the chief causes of over-optimistic demand forecasts in other studies has been that financial constraints may lead to less frequent service or lower speeds than planned. At a minimum, this sensitivity analysis should include documenting the effect of varying levels of service on the resulting forecasts.

4.4 Inadequate justification of constraint on out-of-vehicle travel time

The Panel felt that the constraint imposed on out-of-vehicle travel time in the main mode choice model was unjustified. The rationale for asserting a substantially different value was understood to revolve around the difficulties of calibrating the final model, and the fact that the asserted value (1.0) is roughly consistent with assumptions that (a) out-of-vehicle time equals one-half the headway and (b) out-of-vehicle time is valued twice as much as in-vehicle time. The Panel feels that these two assumptions are valid only for urban trips with small headways, and thus do not justify changing an empirically estimated value – especially because the estimated value is consistent with other results for intercity markets where behavior is much different from an urban market. Specifically, Adler et al. (2005) found that headway for an intercity trip is valued at 0.2 to 0.25 as much as in-vehicle travel time; this result is further supported by unpublished values found by PB in their statewide modeling work. Furthermore, the Panel suspects that difficulties in calibration might have been influenced by under-specification of the choice models as discussed in section 2.3 above.

We want to highlight that the headway variable captures the impact of the schedule delay (the difference, early or late, between desired and scheduled departure time, and not of any initial waiting time at first boarding. The initial waiting time has been shown to be the choice of the traveler reflecting their risk preference with respect to access time, time needed at the station or the stop. If needed, the model should include a variable to capture the waiting times at any transfer, as these are outside of the control of the traveler.

4.5 Excessive use of alternative-specific constants

The destination and mode choice models at both the intra-regional and inter-regional levels have a surprisingly large number of constants. While difficult to independently assess, it would appear that these constants exerted a significant influence on the forecasts, which the Panel feels is an undesirable property of the model. We believe this may be a symptom of an under-specified or mis-specified model as discussed in the above sections (i.e., a model with an inadequate set of observable variables explaining behavior or with an important parameter constrained inappropriately). It is hoped that addressing the issues identified in previous sections will reduce the need for such constants.

5 Long term issues

Several important issues were identified that should be considered to enhance the improved model to provide the best possible estimates of HSR ridership. While not practical to address all of these issues immediately, the Panel believes that their consideration will measurably enhance the utility and credibility of the model and forecasts obtained using it. As per Section 4, pending improvements to the model, we recommend that any use of the model include some steps to make the demand forecasts more conservative, especially in forecasts for financial (investment and risk) analysis.

5.1 Model validation

Apparent omissions in model validation concerned the Panel. It was strongly felt that a number of checks on the reasonability and validity of the model should have been carried out and documented, to include:

- Comparisons to other observations and forecasts in California developed from data sets that are different from those used in this model (e.g., California statewide model, 2001 NHTS);
- Comparisons of forecasted ridership to actual ridership on HSR systems in other parts of the world;¹
- Sensitivity testing of the importance of assumed HSR levels of service and of alternate assumptions about highway and airport congestion;
- Sensitivity testing of the effects of alternate levels of socioeconomic variables used in forecasting, using independent estimates of growth from sources such as Global Insight,

¹ It is recognized that such comparisons are difficult because no comparable service exists within the USA, and several important traveler and social differences exists between North Americas, Europeans, and Asians. However, it is felt that these differences should at least be tabulated and discussed.

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the Federal Reserve Bank of San Francisco, Bureau of Business and Economic Research, and published U.S. Department of Commerce and Census trends;

- Sensitivity testing of assumptions about parking availability at planned HSR stations.

Some of these comparisons may of necessity be more qualitative than the more familiar statistical tests of model performance, but they are essential when modeling non-existent major new transportation modes or services like HSR.

5.2 Stated preference (SP) bias

Another major concern to the Panel is the potential influence of bias introduced by the use of stated preference (SP) survey data in model development. Respondents have been observed in many SP surveys to exhibit various systematic biases concerning their responses to hypothetical options. These biases depend greatly on the details of the survey, as well as the local environment of the respondents themselves. The research community has developed many guidelines to minimize such bias, and this needs to be fully discussed in the validation of the model. It is especially important in this case, because HSR mode share in the “main mode” choice model is determined solely by the SP responses. Thus, if respondents systematically overstate or understate their willingness to ride HSR (perhaps because they support it or oppose it as a concept) the resulting bias will be carried over directly into the HSR ridership forecasts.

We can suggest two ways to address SP bias:

- Examine other studies in the United States where there is more opportunity for internal validation through a combination of SP and revealed preference (RP) survey questions. Where HSR exists, it would be possible to question respondents about both their actual (RP) mode choices and their responses to hypothetical changes in the system (SP). Techniques are available to compare the two in order to illuminate systematic differences. This methodology is well developed in the research literature. Even where true HSR does not exist, a “near HSR” service – such as Amtrak’s Acela service in the Northeast Corridor – would generate useful comparison data. The Panel recommends a search for existing combined RP/SP data sets. If found, an assessment of SP survey bias and a comparison of survey questions and methods with those used by CSI should be undertaken to learn as much as possible about whether such bias might affect the SP data used in the California HSR ridership forecasts. Even studies from abroad can be used for this purpose, despite their limitations for direct comparison of model results due to differences in urban development patterns, urban transit systems, and socio-demographics.
- It is possible to consider HSR as a drastic improvement to existing conventional rail service. California has two of the most well used conventional rail corridors in the United States (Los Angeles-San Diego and San Francisco-Sacramento). It is possible to perform a combined RP/SP survey in these corridors, where respondents are asked both about their use of existing conventional rail and about their hypothetical use of improved service, including both minor and major increases in speed. This will permit a direct investigation of SP bias in California data. Such an investigation is highly recommended as part of any enhancement of this model, as further elaborated in section 6 below.

6 Econometric issues

The survey designed and conducted for CSI included the use of Choice Based Sampling. That is, the sample was biased both for administrative purposes and to ensure that a minimum number of respondents were found to choose each of the major modes (both existing and proposed). The use of a choice based sample is known to bias estimation results unless the estimation procedure is modified to take account of this sampling. The method used by CSI, which was believed to be correct at the time of model estimation, has since been shown to be incorrect and a new procedure has been developed which is correct (Bierlaire et al. 2007). Future estimation work should take advantage of this new knowledge.

7 Data requirements for model enhancement

CSI has presented the Authority with a proposed work plan to continue the evolution of the forecasting process and the underlying models. The Panel focused primarily on the current models and forecasts in this first meeting, which precluded a careful and thorough review of this proposal. However, it was clear even from a cursory review that further data collection will be required for the evolution of the models, even if they are not made available for the re-estimation of the models implied above.

Two tasks – 16 and 17, presumably additions to previous work – are identified in the proposal. Task 16 includes plans for data collection to assist with updating the models, both to refine the existing model as well as support re-estimation of the enhanced model. The Panel supports this proposal. In fact, it is recommended that the data collected be expanded beyond that described in the proposal.

Several panelists advanced the notion that a combined RP/SP survey would be useful, especially if well designed to illuminate the SP response bias in the California context. It obviously cannot be measured for the HSR mode, as it does not presently exist, but would allow its measurement for other modes. Targeted sampling in heavily used conventional rail corridors in the state (i.e., San Diego-Los Angeles, San Francisco-Sacramento) is recommended as a means of conducting SP experiments in an environment as close to HSR as possible. This would allow the direct comparison of SP to RP coefficients, a key to quantifying the effect of respondent bias. Several successful protocols are available to help with design, such as the PAPI or CATI-KITE surveys (Frei et al. 2010).

In order to be useful for model estimation, and especially within the context of the recommendations contained herein, the RP data should include information about several aspects of the long distance trip, to include:

- Primary mode of transport
- Modes of access and egress
- Station choice
- Destination and group (party) size
- Trip frequency and primary purpose

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The use of an eight-week retrospective survey of long distance travel is highly recommended. Such an approach will yield a substantially larger amount of data on such trips than the traditional 24 or 48-hour diaries typically used in household travel surveys.

The Panel has learned that plans for the design of a new statewide travel survey are underway, and perhaps complete. It is highly recommended that the Authority quickly determine the status of such efforts and opportunities for collaboration. The ability to share costs, eliminate duplication of effort, and ensure consistency with other California models should not be lost.

8 Conclusions

The current model system represents an ambitious step towards defining the best practice in North America, replacing ad hoc and closed proprietary models used in many previous HSR feasibility studies. In many ways the model is generally well founded and implemented. However, in order to have full confidence in it the issues identified in Section 4 must be addressed quickly. Moreover, the incomplete, unclear, or out-of-date elements of the documentation discussed in Section 3 must be completed as part of the short-term actions. Once these issues are addressed the Panel will be in a position to make a more definitive determination about the model and forecasts derived from it.

References

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- Frei, A., Kuhnimhof, T. & Axhausen, K.W. (2010), "Long distance travel in Europe today: experiences with a new survey," unpublished presentation at the 89th Annual Meeting of the Transportation Research Board, Washington, D.C., January.

Appendix: Materials Consulted

Cambridge Systematics prepared all documents listed unless otherwise indicated.

2005-07 model development and results

- 2010 Project Level EIR/EIS Technical Appendix (prepared by Parsons Brinckerhoff) Ridership and Revenue (Draft), December 2010
- Report to the Legislature (Business Plan) (prepared by the California High-Speed Rail

- Authority) Source Document 5: Ridership and Revenue Forecasts (by PB), November 7, 2008
- Bay Area/California High-Speed Rail Ridership and Forecasting Study
 - Findings from Third Peer Review Panel Meeting, September 2007
 - Ridership and Revenue Forecasts, August 2007
 - Statewide Model Networks, August 2007
 - Final Report, July 2010
 - Statewide Model Validation, July 2007
 - Interregional Model System Development, August 2006
 - Level-of-Service Assumptions and Forecast Alternatives, August 2006
 - Findings from Second Peer Review Panel Meeting, July 2006
 - Socioeconomic Data, Transportation Supply & Base Year Travel Patterns Data, December 2005
 - Findings from First Peer Review Panel Meeting, July 2005
 - Model Design, Data Collection and Performance Measures, May 2005
- High Speed Rail Study Survey Documentation, December 2005 (Corey, Canapary & Galanis Research)

2008-10 Technical Reports and Forecasts

- Ridership and Revenue Results
 - Revised Service Plan May 2009, August 14, 2009
 - Hanford/Visalia, March 16, 2010
 - Alternative Alignment Between Gilroy and Merced, March 8, 2010
 - Split SF Terminal Operations Scenario and New Caltrain Operating Plan, August 17, 2010
 - Inland Empire Alignment and Station Alternatives, August 17, 2010
 - Alternative Station Configurations in San Diego County, August 17, 2010
 - Alternative Station Locations in the San Fernando Valley, August 17, 2010
 - Anaheim 3 Trains Per Hour Scenario, August 17, 2010
 - San Gabriel Valley Alignment and Station Location Alternatives, August 17, 2010
 - Increased Parking Cost Scenario and Revised 2035 Factoring Process, January 14, 2010
 - Increased Parking Cost Scenario, March 9, 2010
- Ridership and Revenue Forecasting for the Finance Plan, October 2008
- Refinement and Recalibration of the MTC Intra-regional Model, March 2010

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FINAL REPORT

Attachment 2

Independent Peer Review of the California High-Speed
Rail Ridership and Revenue Forecasting Process

Findings and Recommendations from April-July 2011 Review Period

August 1, 2011

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

1 Introduction

The peer review panel held its second formal meeting on May 2-3 at the offices of the San Francisco County Transportation Authority. All members were present except for the recorder, who attended via videoconferencing:

- Frank S. Koppelman, PhD, Professor Emeritus of Civil Engineering, Northwestern University (chair)
- Kay W. Axhausen, Dr.Ing., Professor, Institute for Transport Planning and Systems, ETH Zurich (Swiss Federal Institute of Technology Zurich)
- Billy Charlton, San Francisco County Transportation Authority
- Eric Miller, PhD, Professor, Department of Civil Engineering and Director, Cities Centre, University of Toronto
- Kenneth A. Small, PhD, Professor Emeritus, Department of Economics, University of California-Irvine

Rick Donnelly, PhD, AICP of Parsons Brinckerhoff served as facilitator and recorder for the panel. In this capacity he serves at the convenience of the chair rather than as a representative of the project management team.

The panel invited several others to attend some portions of the meeting. They included Nick Brand from Parsons Brinckerhoff (representing the project management team) and Jeff Buxbaum, David Kurth, and Kimon Proussaloglou from Cambridge Systematics (CS). During the meeting the following broad topics were discussed:

- Briefing on ridership forecasting milestones in the near future (all in attendance)
- Discussion of the proposed Cambridge Systematics work plan for model enhancements (all in attendance)
- Review of CS responses to issues of concern identified in previous peer review panel findings (closed meeting among panelists)
- Discussion of panel assessment of CS responses (all in attendance)
- Identification of topics for further discussion and wrap-up (all in attendance)

Several topics discussed in the meeting were left unresolved, pending further investigation by the CS team. In such instances one or more panelists identified issues or questions during the meeting that could not be answered without further research or model summaries. The panel subsequently met with the CS staff identified above in videoconferences on May 27th and June 14th, 2011 to receive and discuss their responses. This report documents the findings over the panel from all three meetings, as well as teleconferences and email exchanges during that time.

2 Review of Supplemental Documentation

We identified two areas of concern about documentation in Section 3 of our first report. In some instances documentation was incomplete or missing. In other cases key information needed to interpret previous model validation work was not found. CS resolved both issues over the past three months. In addition, CS has re-validated the current model using more recent socioeconomic, travel survey, and traffic count data. The review of this newer data has largely alleviated our concerns with previous gaps of documentation on this subject.

2.1 Documentation Addenda

Following our initial meeting in January, we identified a number of missing, incomplete, or confusing aspects in the documentation. There was no evidence that these issues pointed to problems with the model, but rather that a thorough review of the model could not be completed without this additional information. CS developed a 43-page memo (Cambridge Systematics 2011) summarizing their responses to the information we requested, shown in Table 1. While their responses were limited to information about inter-regional travel¹, we felt that this was highly responsive to their needs, and permitted us to make well-informed impressions of the current model.

Table 1: Incomplete documentation identified in first peer review panel report

<p>Further information about inputs to model application were sought in the following areas:</p> <ul style="list-style-type: none"> • Fare levels and structures • Levels of highway and airport congestion • Levels of service (train frequency) • Levels of ridership and service on competing intercity bus services • Fuel prices • Induced effects • Competitive responses from other modes • Socioeconomic and land use forecast inputs <p>Further documentation of the model validation results were sought, to include:</p> <p><i>For the calibration year only</i></p> <ul style="list-style-type: none"> • Maps, graphs, and tabular summaries of statistical measures of the deviation between assignment results and observed modal flows (road, air, rail) • Tabular summaries of comparisons of assigned versus screenline volumes <p><i>For both calibration and forecast years</i></p> <ul style="list-style-type: none"> • Overall mode shares by origin-destination distance • Mode shares by income • Tables and maps of long distance trips per day by person type and trip purpose • Summary of income elasticities by mode <p><i>For forecast years only</i></p> <ul style="list-style-type: none"> • Mode shares by network distance from HSR stations • Tables of own- and cross-elasticities by model for the time and cost variables across the state, by OD distance or intra-regional pairs, by income group and distance band from HSR stations • A brief assessment of access and egress mode shares by HSR station • Analysis of the effects of forecasts of expert judgments that were made to override estimated model coefficients
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¹ As part of their model design CS defined regions of the state that are aggregations of counties. Inter-regional trips are those with trip ends in different regions, irrespective of the distance traveled, while intra-regional trips have both trip ends within the same region. A map of the regions can be found in Cambridge Systematics (2006).

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We reviewed this memo and its predecessors in great detail, and several hours were spent discussing the information presented. We were very pleased with content, quality, and quantity of the information. Only a few items left us with lingering concerns. We continue to struggle with the arbitrary distinction between intra-regional and inter-regional trips, although we understand the practical rationale for it. We would like a more clearly defined demarcation of geographic travel segments in future work, if the distinction is maintained at all.

We have been concerned about the possibility of discontinuity in mode choice at the 100-mile demarcation between local (less than 100 miles) and long-distance (greater than or equal to 100 mile) travel markets. CS presented evidence that indeed such a discontinuity does occur, but the effect was shown to be small. If the long versus short distance segmentation is retained in the model structure, clear and conclusive evidence should be produced to demonstrate that any remaining discontinuity is small enough to have little to no impact on model forecasts. CS is currently undertaking an exploration of the effect of combining the long and short distance models into a single model that takes account of distance in the model specification. The initial results of such work will be presented to the panel at the planned August 10th and 11th meeting.

We also noted that the reported elasticities for total auto trips with respect to auto travel times have unexpected signs in Table 12 of the CS memo (Cambridge Systematics 2011, but also that they were very small in magnitude and not statistically significant. The panel believes that this anomaly is of negligible importance and is adequately explained by location-specific differences in trip generation effects (as suggested in the CS memo), and is therefore satisfied that no further action is needed with respect to this particular finding.

We are satisfied with the documentation presented in Cambridge Systematics (2011), and conclude that it demonstrates that the model produces results that are reasonable and within expected ranges for the current environmental planning and Business Plan applications of the model.

The longer-term issues mentioned in Section 5 of our report from January, 2011 remain unaddressed. We continue to view these as critical to a full assessment of the credibility of model forecasts for future applications. These were examined in the panel's August meeting and our conclusions will be reported shortly.

2.2 Expanded Validation Efforts

This section considers the work being done by CS to validate and, if necessary, adjust the model to reflect changes in socioeconomic conditions and travel patterns since the years 2000 and 2005, which were the sources of the data used in model development. CS has developed a proposed work plan for enhancement of the current model to address expected future needs of the Agency and our recommendations. We reviewed their fourth draft of the proposal, dated April 20, 2011, in preparation for the May 2-3 meeting. We discussed the proposal at length, and compared it to both the short and long-term recommendations they made after their January, 2011 meeting.

Jeff Buxbaum of CS summarized the anticipated uses of the current model. Owing to the business plan deadline the CS team plans several short-term actions:

- Collection of data for re-validating the model to observed 2008-09 flows. This was scheduled for completion in May and June.

- Changes to the model based on the re-validation work, schedule for completion in June, resulting in an interim model to be used until the next generation model is complete.
- Continued to work on ridership and revenue forecasting with the existing model to evaluate different configurations of initial operating segments (IOS), Phase I, and the full system, scheduled for completion in July.

In parallel to these efforts, CS staff is also planning to carry out enhancements that will be incorporated into the interim model after the business plan forecasts are complete. These enhancements are discussed in Section 4. We discussed the relationship between the current, interim, and possibly a model to be developed in the future, both during the May 2nd meeting and in subsequent internal discussions. We emphasized that any model development work beyond that needed for the IOS and 2011 business plan should be directed towards addressing the long-term issues previously identified in addition to meeting the schedules and capabilities required by the Authority. How exactly that can be done was discussed at length, as summarized in the remainder of this section.

Two important inputs identified for the re-validation work were analyses of the 10 percent sample of air passenger tickets and an Internet panel survey of long distance journeys. The former is being processed by Geoffrey Gosling as part of his work, while the latter will be performed by Harris Interactive to specifications developed by the CS team.

CS plans to use the Harris Interactive data to learn more about long distance journeys in relation to traveler and household attributes (e.g., income, household size, number of workers, auto availability). Harris has a pre-selected and verified a panel of respondents, from which they can deliver responses for a wide variety of desired sample frames. We discussed the representativeness of a pre-selected panel for intercity travel market analysis. While a specially-drawn random sample might in principle offer advantages, time and budget constraints precluded this possibility and the use of the Harris poll clearly represents the most cost-effective way to quickly obtain data needed for short-term improvements to the model.

Two other sources of data – retrospective travel surveys and an upcoming California Department of Transportation (Caltrans) statewide travel survey – represent other possible sources of information to support model development. Again, undertaking a retrospective survey simply is not feasible within the scope of the current work, while the Authority does not appear to be able to influence the design, sampling frame, or other details of the Caltrans survey. While the Harris poll data will provide very useful immediate input to the model upgrade, comparison to the results of the Caltrans statewide travel survey, as soon as it becomes available, will provide additional useful information for the modeling work as well as an additional check on the Harris poll results.

Other potential sources of travel behavior data discussed included the 2009 National Household Travel Survey (NHTS) and Amtrak passenger surveys. The number of intercity trips in the NHTS is very small, greatly reducing its utility for use in this work. California was not one of the states that purchased additional sampling to increase the number of observations using rural and intercity travel. Amtrak historically has not shared data, but CS agreed to renew attempts to identify and obtain relevant data from them. The panel felt that this information would be particularly

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useful for the analysis of IOS alternatives in the Central Valley, where Amtrak will be a larger competitor to HSR than air service. The CS team is also planning to adopt the networks and zone system being used by the statewide travel model under development by the University of California at Davis (UCD). The zone systems of that and the current model are slightly different, but this is not expected to create significant difficulties.

Furthermore, 2030 socioeconomic forecasts are not yet available for the UCD zone system. Jeff Buxbaum reported that new economic data from economy.com will be purchased as a placeholder until an independent economist can be contracted to provide an alternative to the forecasts presently used. We endorse this approach, believing that the testing of alternative economic futures will enhance the credibility of the model with policy-makers and potential investors and enable them to better gauge the risk associated with such assumptions in the forecasts.

3 Short-Term Issues Resolved

We found that significant progress has been made in the resolution of many short-term issues identified in Section 4 of our January 2011 report.

3.1 Representation of Distance Effects in the Model

In Section 4.1 of our first report, we expressed concern about the representation of distance in the destination and mode choice models. In response to our comments, CS conducted tests demonstrating that the discontinuity between the short and long-distance models at 100 miles is present but not quantitatively significant. The evidence from their testing suggests that the number of trips affected is very small, leading us to conclude that further work on this issue – which would likely take the form of joint models of short and long-distance travel – can be deferred and dealt with as part of developing an updated version of the model.

3.2 Observed Heterogeneity

In Section 4.2 of our first report, we outlined concerns that observed heterogeneity was not adequately treated in the current model. At the time, we found no evidence that the forecast results were biased in aggregate, but that an improvement in this area (i.e., characterizing some parameters as functions of distance or household characteristics) was a candidate for quick resolution. CS conducted exploratory estimations of alternative mode choice models that explored the influence of income and its interaction with other variables. This led us to conclude that the effects were significant, which is in line with typical findings from both urban and statewide models, and should be included in an enhanced model structure when possible. However, we found no evidence that the current treatment of income biases model results toward more or less optimistic forecasts.

3.3 Examination of Level-of-Service Variables

In Section 4.3 of our first report we criticized the lack of sensitivity testing of key service variables. CS conducted a large number of sensitivity tests over the past few months that are documented in Cambridge Systematics (2011). We are satisfied that the model is appropriately sensitive across the range of values tested, leading us to conclude that this issue has largely been resolved, apart from station access.

3.4 Constraint on HSR Vehicle Headways

In Section 4.4 we expressed concern with the original model’s constraining of the coefficient on headway to equal that of travel time, for the HSR mode. This was in response to several problems, as described in the original CS final report (Cambridge Systematics 2006) and the Authority’s response on this issue (CHSRA 2010). We continue to believe that a better solution would have been to fully re-estimate the model in ways described in our first report. However, the schedule for producing the 2011 business plan and other deadlines beyond the control of the Authority precluded delaying the project for the four to six months that such work would have required. We also recognize that a viable model sometimes needs professional judgment to overrule statistically estimated parameters, and any of us might also have made such a decision in similar circumstances.

We have examined in detail the question of how the model performs with respect to headway. It is important to note that the portion of waiting time that is independent of headway (e.g. walking time from a station entrance to a platform) is presumed to be included in the mode-specific constants of the model. Thus, the constrained coefficient truly reflects only the effect of headway in mode choice, and cannot be expected to equal the ratio of out-of-vehicle to in-vehicle travel times.

CS calculated the elasticity of total HSR ridership with respect to HSR headway at approximately -0.30 (see last two rows of Table 14 in Cambridge Systematics (2011)). This elasticity is about the same size that the panel would expect, based on experience with urban transit and accounting for the expectation that headway is likely to be less important in intercity than in urban transit. It also compares well to elasticities found in a national survey in Switzerland, covering trips 10-300 km in length, whose values are shown in Table 2. Furthermore, the panel feels that if the original model had kept the estimated coefficient (which was approximately one-

Table 2: Swiss elasticities for long distance travel (Source: Vrtic & Axhausen 2003)
Demand elasticities shown for distances greater than 10 kilometers
(SP parameters at the mean values of the underlying RP trips)

Parameter(s)	Mode	All	Commute	Business	Shopping	Leisure/ Vacation
Travel time car	Car	-0.425	-0.665	-0.68	-0.545	-0.53
	Train/transit	0.671	0.776	1.531	1.008	0.937
Cost car	Car	-0.121	-0.312	-0.076	-0.156	-0.174
	Train/transit	0.191	0.365	0.171	0.288	0.308
In-vehicle-time train/transit	Car	0.365	0.48	0.615	0.46	0.456
	Train/transit	-0.575	-0.56	-1.386	-0.85	-0.805
Fare train/transit	Car	0.157	0.435	0.092	0.223	0.217
	Train/transit	-0.247	-0.508	-0.206	-0.512	-0.373
Access/egress train/transit	Car	0.172	0.272	0.111	0.279	0.127
	Train/transit	-0.272	-0.318	-0.249	-0.515	-0.224
Headway	Car	0.144	0.32	0.154	0.121	0.116
	Train/transit	-0.277	-0.374	-0.346	-0.224	-0.205
Number of travelers	Car	0.115	0.133	0.151	0.101	0.134
	Train/transit	-0.181	-0.156	-0.339	-0.186	-0.237

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fifth as large as the value they constrained it to), the resulting elasticity would have been too low to be plausible. Therefore, we conclude that in the end, this problem with the model did not misrepresent traveler behavior in important ways.

3.5 Excessive Use of Constants

In Section 4.5 of our first report we criticized the excessive use of alternative-specific constants. The fear was that this would cause the model to be unrealistically unresponsive to changes, or to display paradoxical responses to changes in conditions. The extensive documentation provided to us by CS, in response to our first report, does not reveal such unrealism or paradoxical behavior. Therefore, this originally perceived problem with the model does not seem to be adversely affecting its behavior. In particular, we now think that the magnitude of alternative specific constants is neither an indication of poor model fit nor of inadequate representation of the impact of operational or travelers variables on behavior. That said, we still believe that every effort should be made to eliminate the use of such a large set of constants in future versions of the model. They represent current travel patterns that may not hold true under future conditions.

4 Initial Investigations into Mode Choice Model Improvements

In parallel with addressing the short-term issues described above, CS invested considerable effort exploring alternative mode choice model formulations, both to inform future model development work and to investigate the robustness of their current model to changes in specification. The bulk of this work has focused upon the re-estimation of the line haul mode choice models. We anticipate that this work will be incorporated into a new version of the modeling system that will be available for use sometime in 2012.

4.1 Long Distance Mode Choice Model for Business Trips

The panel previously expressed reservations about the omission of income from the current line haul mode choice model. Several model formulations designed to incorporate this effect and others were presented, all with encouraging estimation results. The panel offered several observations and interpretations of the findings, all of which were agreed with by CS:

- The model was tested using both three and seven groupings of income. The panel agreed that three income levels, as suggested by CS, appeared to perform as well as seven, and this smaller number of categories is easier to forecast and implement. These income categories, plus one for missing income information, substantially improve the model and give sensible results when interacted with the cost variable. We maintain our longer-term recommendation that estimation of imputed income be undertaken to (1) obtain continuous values of household income to replace the current categorical variables, and (2) provide income estimates for households for which no income response was given.
- With respect to mode-specific dummy variables for income categories, it appears that interacting cost and performance variables with all income categories would be over-fitting. We recommend retaining only the high-income category for this purpose. We continue to recommend that over the longer term, a variable defined as cost adjusted by a function of income be explored when additional choice data (revealed or stated preference) becomes available.
- Reliability was found to be statistically insignificant for business trips. This was not entirely unexpected, as some panel members suspect that the effects of reliability are

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embedded in the constants due to an inability of SP data questions to fully capture reliability as viewed by the user. New data collection should consider representing reliability in terms of the distribution of possible travel times, so that a variable could be constructed representing the time difference between the median and 80th (or 90th) percentile of the time distribution. Small, Brownstone, and colleagues, who have devoted substantial efforts to studying the usefulness of alternative measures of reliability, has adopted this formulation. It was also felt that reliability might become a more significant determinant of behavior as highway congestion increases. In principle, reliability is a relevant policy variable for designing a rail system because it can help guide operational decision-making. In practice, however, reliability cannot be forecasted accurately enough at this time for it to be a useful part of the demand model for its short- and medium-term uses. Rather, it would be desirable to include this variable as an enhancement of models to be estimated for longer-term future uses.

- Including non-linear distance interaction effects led to a significant improvement in model fit without major changes in time, cost, or other coefficients. We agree with the CS proposal to include it as in Interim Models 2A and 2B in Table 4 of Cambridge Systematics (2011). Additional refinements for the longer term that are worth exploring are: (1) replacing the distance interaction with use of non-linear transforms of the base variables (e.g., powers of line haul travel time); and (2) differentiating non-linear distance interaction effects or non-linear transforms of base variables by time of day.

Overall we were satisfied with the estimation results, and strongly endorse their inclusion in the next version of the modeling system.

4.2 Long Distance Mode Choice Model for Non-Business Trips

CS has tested several alternative formulations of the model of non-business and non-commuting trips over the past several months. The most promising ones were shared with us during the May 2-3 meeting in San Francisco and in subsequent videoconferences. In this model, unlike the model of business trips, the inclusion of income led to unsatisfactory results, leading us to recommend removing income from this portion of the model until further investigation with new data can take place.

Paradoxically, reliability proved to be a reasonably strong factor in this model, whereas it was not for the business long distance travel. Because of that paradox, we recommended that reliability be excluded from this model, as well as the model for business trips, for the reasons outlined in Section 4.1.

The specification and interpretation of the headway coefficient were discussed at length, as in the case of the model of business trips. As before, one cannot choose between competing specifications solely based on estimation results. We were concerned that the SP experiment described to survey respondents included frequencies between one and two trains per hour, but that the application range is much larger. As a result, any tapering effect at higher frequencies, which is likely a priori and might be important to forecasts, would not be detected within the bounds of the SP survey. In this case, the difference between using frequency versus logarithm of frequency as a variable would be important. Insofar as it is feasible and fits well, we recommends that the same specification be used in both the business and non-business long distance models.

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We make the same recommendations with respect to the distance coefficient in this model as it does for the model of long-distance business trips. Overall, we are satisfied with the estimation results, view the resulting model as superior to the current formulation, and recommend that this enhanced model be implemented as quickly as possible. Future analyses should examine a non-linear transformation of several variables in place of interactions with distance.

4.3 Models of Short-Distance and of Pooled Short and Long-Distance Trips

The CS team briefly presented three short distance models. They covered business, commuting, and non-business travel. In addition, the team presented a combined model of mode choice that includes both short and long-distance trips. These models each had some advantages and disadvantages, leading us to recommend further model development. It noted that when the in-vehicle time, cost, and service frequency variables were differentiated between commuting versus business travel, the resulting coefficients were significantly different, suggesting the need for separating these two purposes.

4.4 Restructuring the Segmentation of Trips by Purpose Rather than Distance

CS estimated models that differentiated between commuting and business travel. Several interesting results were obtained, including a reduction in the magnitudes of the in-vehicle time coefficients relative to the current model, smaller egress logsum coefficients, and reasonable implied values of time by income segment. However, the nesting coefficients were slightly higher than 1.0 (although perhaps not significantly so), and model fit was better for business-only travel versus pooled commuting and business purposes. When the in-vehicle time, cost, and service frequency variables were differentiated between commuting versus business travel, the resulting coefficients were significantly different, suggesting the need for separating these two purposes.

5 Conclusions

The work completed by CS since the first meeting of the panel has greatly improved our confidence in the existing model. We were encouraged by the depth and extent to which CS addressed the short-term issues we identified in January. Further, we support the work that CS has undertaken to date for model improvement. This conclusion is based upon the work they have done to address those issues identified by ourselves and critics as potentially critical shortcomings of the model. In addition, our examination of additional data and analyses provided to us by CS, has led us to determine that these issues are not critical to current applications of the model.

We also find that the strategy being used by CS to go forward, namely building a substantially improved model for future work, is paying off very well. Key to this strategy are improvements to the mode choice model, which have in part now been completed as described in Section 4 of this report, and we believe this component of the model will provide a sound basis for the further demands on the model called for by future forecasting needs.

References

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Cambridge Systematics, Inc. (2011), "Information requested in 'Section 3.2 Validation and Documentation' of the Independent Peer Review of the California High-Speed Rail Ridership and Revenue Forecasting Process, 2005-10, Draft Report for Internal Review."

Vrtic, M. and Axhausen, K.W. (2003), Verifizierung von Prognosemethoden im Personenverkehr: Ergebnisse einer Vorher-/Nachher Untersuchung auf der Grundlage eines netzbaasierten Verkehrsmodells, Endbericht an die SBB - Division Personenverkehr und Bundesamt für Raumentwicklung – Technischer Bericht, IVT, ETH Zürich, Zürich.

The CHSRA and Cambridge Systematics references are available online at http://www.calhighspeedrail.ca.gov/Ridership_and_Revenue_Forecasting_Study.aspx

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December 4, 2009

Attachment 3

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

ATTN: Altamont Corridor Rail
Project EIR/EIS

RE: Notice of Preparation for Environmental Impact Report/
Environmental Impact Statement (EIR/EIS) for Altamont
Corridor Rail Project from Stockton to San Jose,
California.

Dear Mr. Leavitt:

Thank you for the opportunity to provide scoping comments for the EIR/EIS for the above-referenced project. These comments are provided on behalf of my clients: the Planning and Conservation League, the California Rail Foundation, and the Transportation Solutions Defense and Education Fund.

My clients appreciate the Authority's moving forward on preparing an EIR/EIS for this very important project. However, my clients are concerned that it does not appear that the proposed project is currently funded. A basic question, therefore, is the feasibility of this project in the absence of funding. From that standpoint, my clients believe that it is important that the alternatives section of the EIR/EIS consider alternative projects that might have greater feasibility, i.e., a better prospect of funding. In particular, especially given that the Authority is being required to revise its Programmatic EIR/EIS for the Bay Area to Central Valley High-Speed Rail Project and revisit its decisions on that project, my clients believe the EIR/EIS needs to include consideration of an alternative where the Altamont Rail Corridor alignment serves as the route for that project. Such an alternative would provide funding for the Altamont Rail Corridor. In addition, the combined project would add the benefit of the resulting ACE service between the Northern San Joaquin Valley and San Jose to the benefits of the previously approved Bay Area to Central Valley High-Speed Rail Project, without increasing project costs.

In addition, this alternative would allow High-Speed Rail service to be extended from San Jose to Sacramento in an earlier time frame, at a lower cost and with a much higher ridership than would otherwise be possible.

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The I-580 Alternative

This Alternative seeks to achieve the fastest possible travel times through the Tri-Valley at the lowest cost and with the least disturbance of residents. To avoid the substantial expense of tunneling and/or bridging through the Niles Canyon area, an existing rail right-of-way would be converted from the BART gauge to standard gauge. This alternative would take advantage of the proposed BART Livermore Extension, now in its DEIR comment process, by replacing the proposed BART service with ACE service and adding a new Isabel/I-580 station. The alternative would thus provide for a Livermore Extension.¹ High-Speed and ACE trains would emerge into the Tri-Valley from the tunnel through the Altamont Pass and travel entirely within the I-580 right-of-way, thus minimizing travel time, construction cost and community impacts. The Dublin and Isabel stations would be built with proper height platforms, and equipped, if possible, with a center run-through track for express service. This Alternative would be far more cost-effective than separately building both a BART Livermore Extension and an Altamont Corridor Rail Project. Using standard gauge, HSR-compatible tracks would also add the flexibility of being able to connect a wide variety of destinations with direct local and express service.

The I-580 rail right-of-way would then connect to the Capitol Corridor to San Jose. (See attached map, where the short purple line indicates a cut-and-cover tunnel under a high school's athletic fields.) If a wye were installed at that point, ACE and HSR service to Oakland could be provided as well. An intermodal station would be built either where the I-580 rail line crosses the BART Fremont line, or at Shinn Street, allowing transfers to the existing BART system. Especially if purchase of this portion of the Capitol Corridor became possible, it would enable greatly improved service not only to downtown San Jose, but also to North San Jose and Santa Clara, with associated greater ridership and larger travel market.

The Transbay Alternative

While not part of the proposed alignment for the Altamont Corridor Rail Project, my clients also ask that the Authority study an alternative route that would enable both ACE and High-Speed Rail trains on the Altamont Corridor to access the Caltrain Corridor to San Francisco. To connect the Altamont Corridor to San Francisco, the I-580 rail corridor could be extended along I-238 into San Leandro. It would then use a cover-and-cut tunnel under Lewelling Blvd., until turning to parallel the Bay shoreline. From there it would travel south,

¹ While the alternative designates the rail gauge and cities served, it is agnostic on the political question of which agency--BART, ACE or the CAHSRA--would operate the service.

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roughly parallel to the shoreline, until turning onto a new two-track high rail bridge, parallel and next to the San Mateo Bridge. (See attached map.) Once across the Bay, the tracks would connect into the Caltrain Corridor via an AirTrain station near the Airport. This alternative, by avoiding residential areas along the Peninsula, would also avoid the significant community impacts identified in previously-studied Bay Area to Central Valley Alternatives.

By connecting to the Caltrain Corridor much further north than other proposed alternatives, this Transbay Alternative would also eliminate much of the conflict with UP freight traffic on that Corridor, making the remaining conflicts more manageable. Building this rail bridge would have the added benefit of providing additional Transbay capacity for future growth of BART ridership. Providing a separate connection to San Francisco for Tri-Valley and Central Valley travelers would remove a substantial passenger load from the Transbay Tube, thereby freeing up capacity for expected growth of demand for BART service in the Inner East Bay.

The Local Service Alternative

If funding can be found for proposed Smart Growth efforts in Livermore, a low-cost Local Service Alternative could also be included. This alternative would divert from the I-580 rail right-of-way to join either the current ACE alignment or the former SPRR right-of-way as close to the tunnel as possible. A single-track line dedicated to HSR-compatible trainsets, with passing sidings as needed, would serve stations at Vasco Road and Downtown Livermore. With funding for this Local Service Alternative, there would be no need to build a station at Isabel, thus enabling higher operating speeds on the main line, with only one HSR stop in the Tri-Valley. This line would have adequate capacity for the service levels expected for this area, while reducing construction costs and the need to acquire additional right-of-way. This alternative would provide a low-cost, low-impact connection from the Downtown Livermore station to the I-580 rail right-of-way. It is not clear that any of the current BART Livermore Extension alternatives meet these criteria.

Oakland Alternative

Another alternative that should be considered, in that same context, is a corridor that would provide direct service to Oakland as well as to San Jose. In addition to the service to Oakland *per se*, this option could also provide greatly improved service to San Francisco as well.

Cumulative Impacts

The EIR/EIS should also more generally include a discussion of cumulative impacts including both the Altamont Corridor Project's impacts and those of the two high-speed rail projects being conducted by the authority (the Los Angeles to Fresno

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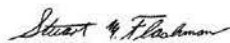
segment and the Fresno to San Francisco segment). Of course, an alternative that integrates the Altamont Corridor Project into the Bay Area to Central Valley High-Speed Rail Project would automatically include such cumulative impacts in its analysis.

The EIR/EIS should also take into account the potential problems that would be created for the Bay Area to Central Valley High-Speed Rail Project if the Authority is unable to reach agreement with the Union Pacific Railroad (UP), pursuant to that company's MOU with the Peninsula Joint Powers Authority, over the High-Speed Rail Authority's use of the Caltrain right-of-way for intercity passenger rail service. At the moment, it appears that such an agreement is unlikely. Consequently, the EIR/EIS needs to discuss the impact on Bay Area transit service, including the Altamont Rail Corridor Project, and on regional GHG emissions if the High-Speed Rail line is unable to use the Caltrain right-of-way between San Francisco and San Jose.

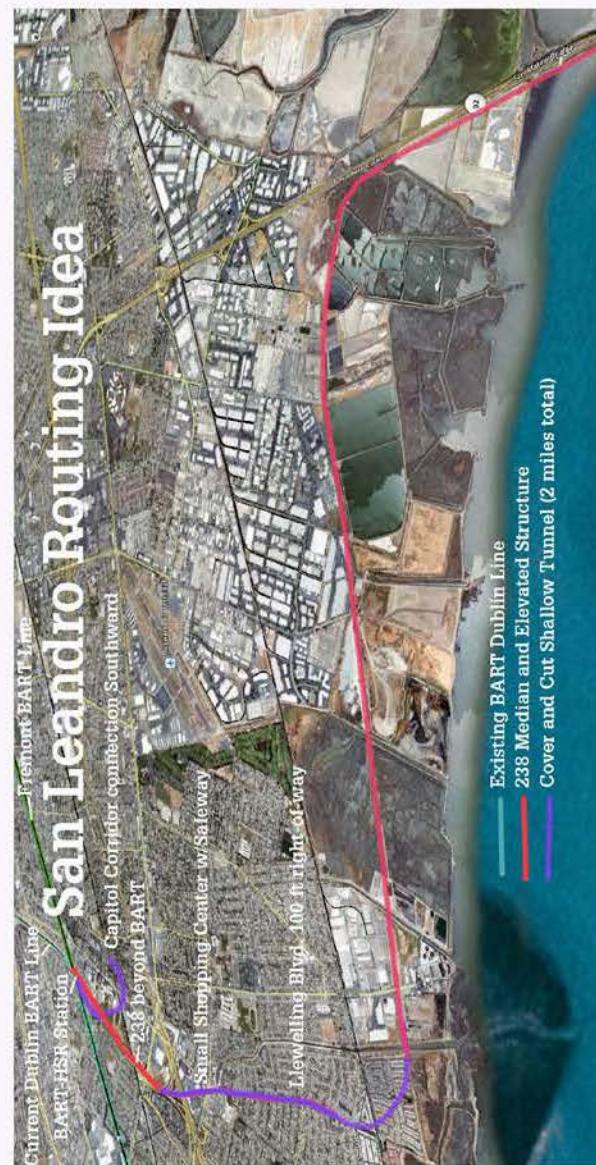
Finally, if the Authority is unable to reach agreement with UP over use of the Caltrain right-of-way, the EIR/EIS should include discussion of alternative approaches to extending service from the Altamont Corridor Project into San Francisco. These should include, in addition to extending corridor service into downtown Oakland and connecting to BART at that point, extending service into another part of Oakland (e.g., the Oakland Coliseum area) and connecting to BART at that point, or options for a new Bay Crossing, perhaps combining both local and regional rail service, similar to that suggested above, that could provide direct access to San Francisco without the need to use the Caltrain right-of-way.

Thank you for allowing these comments on the proposed scope of the Altamont Rail Corridor Project EIR/EIS. Please keep me, and my clients, informed of future developments on this project.

Most sincerely,



Stuart M. Flashman



Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Attachment 4

Statement on California High-Speed Rail by:
Congresswoman Anna G. Eshoo
Senator S. Joseph Simitian
Assemblyman Richard S. Gordon

April 18, 2011

Since the passage of Proposition 1A in 2008, each of us has expressed our support for "high-speed rail done right," by which we mean a genuinely statewide system that makes prudent use of limited public funds and which is responsive to legitimate concerns about the impact of high-speed rail on our cities, towns, neighborhoods and homes.

To date, however, the California High Speed Rail Authority has failed to develop and describe such a system for the Peninsula and South Bay. For that reason, we have taken it upon ourselves today to set forth some basic parameters for what "high-speed rail done right" looks like in our region.

We start with the premise that for the Authority to succeed in its statewide mission it must be sensitive and responsive to local concerns about local impacts. Moreover, it is undeniable that funding will be severely limited at both the state and national levels for the foreseeable future.

Much of the projected cost for the San Jose to San Francisco leg of the project is driven by the fact that the Authority has, to date, proposed what is essentially a second rail system for the Peninsula and South Bay, unnecessarily duplicating existing usable infrastructure. Even if such a duplicative system could be constructed without adverse impact along the CalTrain corridor, and we do not believe it can, the cost of such duplication simply cannot be justified.

If we can barely find the funds to do high speed rail right, we most certainly cannot find the funds to do high speed rail wrong.

Accordingly, we call upon the High-Speed Rail Authority and our local CalTrain Joint Powers Board to develop plans for a blended system that integrates high-speed rail with a 21st Century CalTrain.

To that end:

- We explicitly reject the notion of high-speed rail running from San Jose to San Francisco on an elevated structure or "viaduct"; and we call on the High-Speed Rail Authority to eliminate further consideration of an aerial option;
- We fully expect that high-speed rail running from San Jose to San Francisco can and should remain within the existing CalTrain right of way; and,
- Third and finally, consistent with a project of this more limited scope, the Authority should abandon its preparation of an EIR (Environmental Impact Report) for a phased project of larger

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

dimensions over a 25 year timeframe. Continuing to plan for a project of this scope in the face of limited funding and growing community resistance is a fool's errand; and is particularly ill-advised when predicated on ridership projections that are less than credible.

Within the existing right-of-way, at or below grade, a single blended system could allow high-speed rail arriving in San Jose to continue north in a seamless fashion as part of a 21st Century CalTrain (using some combination of electrification, positive train control, new rolling stock and/or other appropriate upgrades) while maintaining the currently projected speeds and travel time for high-speed rail.

The net result of such a system would be a substantially upgraded commuter service for Peninsula and South Bay residents capable of accommodating high-speed rail from San Jose to San Francisco.

All of this is possible, but only if the High-Speed Rail Authority takes this opportunity to rethink its direction.

Over the course of the past 18 months the Authority has come under considerable criticism from the California Legislative Analyst's Office, the Bureau of State Audits, the California Office of the Inspector General, the Authority's own Peer Review Group and the Institute of Transportation Studies at the University of California at Berkeley. The Authority would do well to take these critiques to heart, and to make them the basis for a renewed and improved effort.

Frankly, a great many of our constituents are convinced that the High-Speed Rail Authority has already wandered so far afield that it is too late for a successful course correction. We hope the Authority can prove otherwise.

An essential first step is a rethinking of the Authority's plans for the Peninsula and South Bay. A commitment to a project which eschews an aerial viaduct, stays within the existing right-of-way, sets aside any notion of a phased project expansion at a later date, and incorporates the necessary upgrades for CalTrain - which would produce a truly blended system along the CalTrain corridor - is the essential next step.

Attachment 5

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Caltrain Capacity Analysis Update



August / September 2011 Stakeholder Meetings

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Presentation Topics

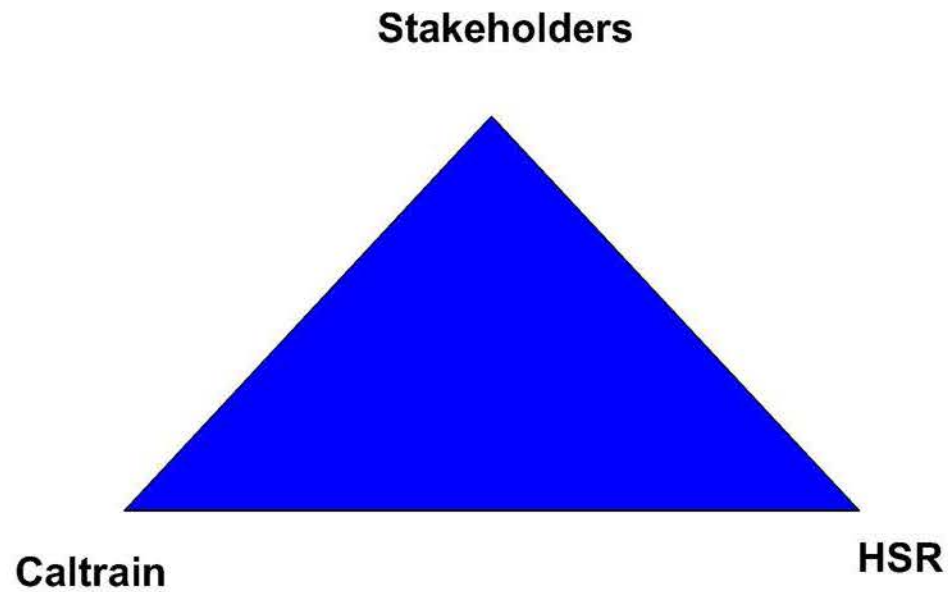
- Modernization Program
- Capacity Analysis Update
 - Context
 - Preliminary Findings
- Next Steps
- Discussion

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Caltrain Modernization Program

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Partnership



Caltrain Program Focus Areas

- Projects
 - Caltrain Electrification
 - Advanced Signal Upgrade

- Coordinated Planning
 - HSR
 - Stakeholders

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Capacity Analysis Update

HSR Context

- HSR Priority Segments
 - Merced to Fresno; Fresno to Bakersfield
 - Spring 2012 Environmental Clearance

- HSR Business Plan
 - Initial Operating Segment being defined
 - Extend North? South?

- SF to SJ Segment
 - Design and EIR/EIS work on hold

Peninsula Vision

- Elected officials call for “blended system”
- What is it?
 - System from SJ to Transbay Terminal
 - Support both Caltrain and HSR
 - Utilize existing right of way and tracks
 - Minimize impacts to communities
 - Lower project cost

Caltrain Capacity Analysis

- Is the “blended system” concept feasible?
- Multiple considerations
 - ➔ **Operational**
 - Infrastructure
 - Cost (Capital & Operating)
 - Ridership
 - Prop 1A requirements
 - CEQA/NEPA requirements

Scope of Work

- LTK Engineering Services
- Build simulation model
 - Main Line
 - Terminals
- 1st set of model runs / analysis

Preliminary Findings (Summer)

- 2nd set of model runs / analysis
- Draft Analysis

Simulation Model - System and Train

System	Electric Advanced Signal System
Trains	Caltrain EMU trains High-speed rail trains

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Simulation Model –Tracks

<p>Base</p>	<p>Mainline (4th & King to Diridon)</p> <p>Current Capital Projects</p> <ul style="list-style-type: none"> – San Bruno – South Terminal
<p>Additions</p>	<p>HSR Stations</p> <ul style="list-style-type: none"> – 4th and King – Millbrae – Diridon

Simulation Model – Passing Tracks

<p>Tested</p> <p style="text-align: center; color: blue; font-size: 2em;">→</p>	<p>North (4 track section) <i>(Bayshore to Millbrae)</i></p> <p style="color: blue; font-weight: bold;">Middle (4 track section)</p> <p style="color: blue;"><i>(Hayward Park to Redwood City)</i> <i>(Hayward Park to San Carlos)</i></p>
<p>Not Yet Tested</p>	<p>South (4 track section)</p> <p>Long (3 track section)</p>

Preliminary Findings

- Blended system concept has merit
- Potential up to 10 trains / hour / direction

Passing Tracks Middle (4 track section)	No	Yes
Caltrain	6	6
HSR	2	4

14

Tested Service Characteristics

	Caltrain	HSR
Travel Speeds (<i>up to</i>)	79mph*	79mph 110mph
Headways (<i>peak hour</i>)	6 trains (5 - 20 min.)	<u>Without passing tracks</u> 1 train (60 min.) 2 trains (30 min.)
	6 trains (5 - 15 min.)	<u>With passing tracks</u> 3 trains (20 min.) 4 trains (15 min.)
Station Stops (<i>one-way</i>)	13 -14	3

*Note: Caltrain to be tested at up to 110mph

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Next Steps

Outreach

- **Scheduled Public Venues**
 - San Mateo Rail Corridor Working Group (August 17th)
 - Friends of Caltrain (August 19th)
 - Peninsula Cities Consortium (September 2nd)

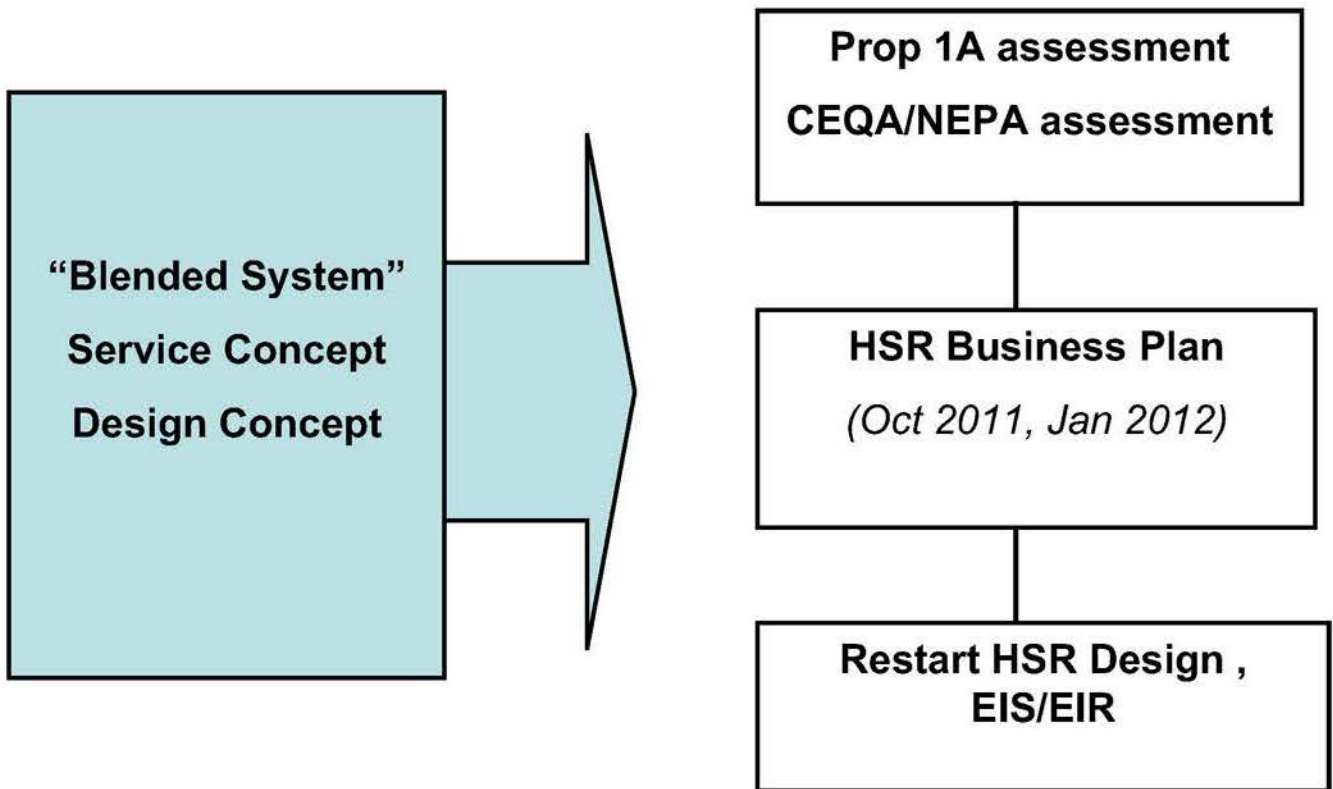
- **Other**
 - Transportation Agencies
 - Cities / Counties
 - Bay Area Council
 - San Francisco Planning + Urban Research Association
 - Peninsula Freight Rail User’s Group

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Concept Development

- Additional rail service simulations / analysis
- Design
 - Passing tracks (4 track section) location
 - Grade crossings upgrades/separations/closures
 - System upgrades
- Project cost estimate

HSR Coordination



Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Discussion

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Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued



Attachment 6

November 2011

Dear Stakeholders,

Caltrain needs to be modernized.

We need to implement Caltrain electrification, procure electric trains and install CBOSS PTC (an advanced signal system). These efforts will allow us to operate an electric rail service that is safer, more efficient and "greener".

The vision for Caltrain is clear and has been confirmed by the Joint Powers Board and the region. However, funding for modernizing the system has been illusive and the greatest impediment to project advancement.

In 2008, the voters approved Proposition 1A which authorized state funding for high speed rail in California. This was clearly a significant milestone for the state of California, but also for Caltrain.

The high speed rail project, an electrified system, has been defined to use the Caltrain corridor to reach its northern terminus, downtown San Francisco. What this means is that Caltrain and high speed rail can combine local and new resources to advance electrification of the Peninsula rail corridor.

Since the passage of Proposition 1A, Caltrain and high-speed rail have been defining infrastructure needs to provide enhanced local, regional and statewide high speed rail transit service.

Originally envisioned was significant expansion of the existing Caltrain corridor to support a four-track system. However, such an expansion would have significant impacts on local communities that are difficult to justify for the foreseeable future.

In 2011, in response to growing local concerns, US Congresswoman Anna Eshoo, State Senator Joe Simitian and State Assemblyman Rich Gordon, challenged us to rescope the project and minimize impacts. They called for a "blended system" which would have both Caltrain and high speed rail using the existing tracks (primarily a two track system) to the greatest extent possible instead of expanding to a four track system along the entire corridor.

As a first step in exploring the feasibility of a blended system, Caltrain needed to understand if sharing the tracks was operationally feasible and acceptable.

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

The attached report is an operational analysis conducted by LTK Engineering Services, prepared for Caltrain. The analysis shows that a blended system in the Caltrain corridor is operationally viable. The attached report is a "proof of concept" showing tested service scenarios supporting both Caltrain and high speed rail systems on shared tracks. It is important to know that this report does not define "the" service plan to be implemented. Separate and following this analysis, additional studies and dialogue with stakeholders need be done before specifying what the blended system will ultimately be.

It is with a genuine sense of optimism that I share this report with you. The results of this study give us a reason to begin a new collaborative dialogue on how we might shape the future of our Caltrain corridor for our customers today and tomorrow. I look forward to continuing to work with you in shaping our future.

Michael J. Scanlon

Draft

**Caltrain/California HSR
Blended Operations Analysis**

DRAFT

Prepared for:
Peninsula Corridor Joint Powers Board (PCJPB)

Prepared by:
LTK Engineering Services

November 2011

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

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0 Executive Summary

This report presents the results of detailed operational analyses of multiple "blended system" solutions for accommodating future Caltrain commuter rail and high speed rail services on the Caltrain Corridor between San Jose and San Francisco. These solutions are based on two services sharing rail tracks along most segments of the Corridor.

The operational analysis was based primarily on a computer simulation model of the Caltrain Corridor, capturing the trains, station stop (dwell) times, tested schedules, track, signals and track junctions (interlockings) of the future system. The computer simulation model software used to conduct the analysis, TrainOps®, is a proprietary software application developed by LTK Engineering Services. The model was customized for application to the Caltrain and high speed rail operations analysis.

The virtual world modeled in the simulation software is different than the current Caltrain system. Key differences include electrification of the Caltrain system, new Caltrain rail cars ("rolling stock") that have electric propulsion and an advanced signal system (CBOSS PTC). With electrification and an advanced signal system in place, the simulation model reflects a Caltrain Corridor with superior performance attributes compared to today's diesel system. This results in the ability to support more train traffic than can be supported today.

In some versions of the simulation model, limited new tracks in select areas of the corridor to support high speed rail stations and passing (overtake) locations to allow high speed rail trains to bypass Caltrain trains were assumed. Versions of the simulation model also varied in terms of simulated Caltrain and high speed rail train speeds, ranging from 79 mph to 110 mph.

The key findings from the simulation model and associated operations analysis are as follows:

- A blended operation on the Caltrain Corridor where Caltrain and high-speed trains are sharing tracks is conceptually feasible.
- An electrified system with an advanced signal system and electric trains increases the ability to support future train growth in the corridor.
- The blended system without passing tracks for train overtakes can reliably support up to 6 Caltrain trains and 2 high speed rail trains per peak hour per direction.
- The blended system with passing tracks for overtakes can reliably support up to 6 Caltrain trains and 4 high speed rail trains per peak hour per direction.
- Supporting high speed rail trains result in non-uniform Caltrain headways.
- Increasing speeds from up to 79 mph to 110 mph decreases travel times for both rail services.

The findings from this analysis should be viewed as a "proof of concept" in analyzing the conceptual feasibility of blended operations. The assumptions in the analysis

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should be considered as test inputs for analysis and should not be considered as decisions on what the blended system will look like. It is also important to note that the findings are based on a simulation modeling exercise; additional due diligence is needed to ensure that the findings provide sufficient reliability and flexibility for "real world" rail operations.

With a key finding that the Caltrain Corridor blended operations is conceptually feasible; this technical report should be used as a basis for additional discussion by stakeholders for exploring and refining the many blended system alternatives. Subsequent work to be completed include: engineering, identifying maintenance needs, cost estimating, ridership forecasts and environmental clearance.

DRAFT

1 Introduction

This report provides a high level overview and detailed technical assumptions of the feasibility analysis of Caltrain Corridor "blended operations." The blended operations concept reflects Caltrain commuter rail and California High Speed Rail (HSR) trains commingled on the same tracks for much of the Corridor between San Francisco and San Jose. A number of smaller scale infrastructure enhancements have been suggested to enhance the blended operations concept, allowing a greater number of overall trains on the Corridor and/or ensuring that trains operate with virtually no delay due to congestion on the line.

Blended operations being conceptually feasible means identifying future scenarios where the desired level of commuter and high speed rail service can be accommodated and these services can operate with virtually no delays (increased travel time) from terminal to terminal. The basis for assessing the conceptual feasibility of blended operations must include "practical" – as opposed to "theoretical" – assumptions such that any forecasts operational results are achievable under the inevitable day-to-day variations in weather, passenger loads, rolling stock performance, infrastructure availability and the like.

LTK Engineering Services (LTK), working closely with multiple Caltrain departments and California High Speed Rail Program Management staff, was responsible for performing the feasibility analysis of blended operations. LTK was retained by Caltrain for the analysis and worked closely with both future rail operators to ensure concurrence with assumptions and methodologies before advancing the work.

The blended operations analysis used a computer simulation model of the Caltrain Corridor that spanned the territory from Tamien Station, south of San Jose, to the San Francisco terminal at 4th and King. The model replicated the behavior of trains, station stop (dwell) times, schedules, track, signals and track junctions (interlockings), including the dynamic interaction of these entities in the complex railroad operating environment.

The smaller scale infrastructure enhancements consist of short sections of additional railroad track to be used by faster trains (HSR) to overtake (pass) slower trains (Caltrain). During the morning and evening peak period, the higher volume of both HSR and Caltrain trains means that overtakes happen in both directions at about the same time.

The overall guiding criterion for defining overtake segment options is that operational overtakes should improve integration of HSR and Caltrain services with neither service being routinely delayed at an overtake location by the other service. Other criteria include the following:

- Overtake tracks should be located where their construction and operation limit impacts to adjoining communities.

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- Overtake tracks should be sufficiently long to support 7+ minute travel time difference between commuter and HSR trains; and
- Overtake tracks should connect to existing four-track segments of the Caltrain Corridor where possible to minimize capital cost.

The computer simulation model software used to conduct the analysis, TrainOps®, is a proprietary software application developed by LTK Engineering Services. The model was customized for application to the Caltrain and high speed rail operations analysis.

The future “no build” (no action) scenario modeled in the simulation software is different than the current Caltrain system, including differences in propulsion (electrification versus the current diesel propulsion), rail cars (electrified vehicles versus the current diesel locomotive-pulled coaches) and signal system (advanced communications-based system versus a wayside-only system with discrete update locations along the track). With electrification and an advanced signal system in place, the simulation model reflects a Caltrain Corridor with superior performance attributes compared to today’s diesel system.

An incremental approach was used in the development of blended operations scenarios. The model started with the “6/0” scenarios (6 Caltrain and 0 HSR trains per peak hour per direction), then layered in additional HSR trains.

HSR frequencies were increased from an initial service level of 1 train per hour per direction to up to 4 trains per hour (bringing total Corridor train volumes to 10 trains per hour per direction). At the same time, Caltrain scheduling strategies (i.e. modifying train stopping patterns) varying maximum operating speeds and assumed infrastructure were also tested, with each scenario changing only one variable (scheduling strategies, train volume, infrastructure or maximum operating speed) at a time so that the impact of the change could be precisely understood.

Where a simulated train volume in a given scenario resulted in unacceptable train congestion and delays for a given infrastructure and a given maximum operating speed, the follow-on simulation scenarios with higher train volumes appropriately included additional infrastructure or changes in maximum operating speeds to eliminate the unacceptable train congestion and delays.

This incremental “three dimensional matrix” of service level, maximum train speed and infrastructure produced a very large number of potential scenarios, which was limited to a number that could actually be simulated in a reasonable time by using the results of initial scenarios to guide the study team in identifying subsequent scenarios that showed promise of blended operations conceptual feasibility. By using “practical” (conservative) input assumptions and appropriate schedule margin (“pad” or “recovery allowance”), the Study team had confidence that simulated blended operations conceptual feasibility can be translated into actual operational feasibility in “real world” conditions.

Included in this report are the details of the simulation modeling effort and the key findings. Chapter 2 provides information about the TrainOps simulation modeling tool used for the analysis. Chapter 3 focuses on the assumptions and inputs into the Caltrain Corridor model and the individual scenarios tested. Chapter 4 details the simulation results specific to individual scenarios as well as overall assessment of the conceptual feasibility of blended operations. Chapter 5 summarizes the key findings and next steps.

The report also includes three appendices. Appendix A includes detailed tables of Caltrain tested schedule changes required for certain future simulation scenarios. Appendix B includes graphical time-distance (“string”) charts that reflect the peak period simulated train performance of all of the trains operating in the Caltrain Corridor in each scenario. Appendix C provides a glossary of technical and railroad operational terms for the reader’s convenience.

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2 TrainOps® Simulation Modeling Tool

Summary: This chapter describes the computer software application (TrainOps) that was used to conduct the simulations for the Caltrain Corridor “blended operations.” The software validation process and examples of other rail systems that have used this software application are also described.

2.1 General Description and Capabilities

The TrainOps simulation modeling tool is a proprietary software application developed and enhanced by LTK Engineering Services. TrainOps was specifically enhanced for application to the Caltrain/California HSR Blended Operations Analysis in order to accurately model the specified functionality of an advanced signal system, known as Communications Based Overlay Signal System Positive Train Control (CBOSS PTC) system planned for the Caltrain Corridor.

More generally, TrainOps accurately models the performance of individual trains and the interaction of trains, based on user inputs for rolling stock, track alignment, train control, dispatching and operating plans.

The program provides user-friendly inputs (including the ability to “cut and paste” from spreadsheets) for all relevant system and rolling characteristics, including:

- Route alignment data, including track gradients, horizontal alignment and speed restrictions (which can differ by train class),
- Passenger station locations,
- Train data, including weight, dimensions, propulsion system characteristics, and braking system parameters,
- System train control data, including wayside signaling, cab signaling and Positive Train Control inputs,
- Operations data, such as train consist sizes, train consist manipulations at terminals/yards, operating plan (timetable) inputs, passenger station stopping pattern, and station dwell times.

2.2 Software Validation

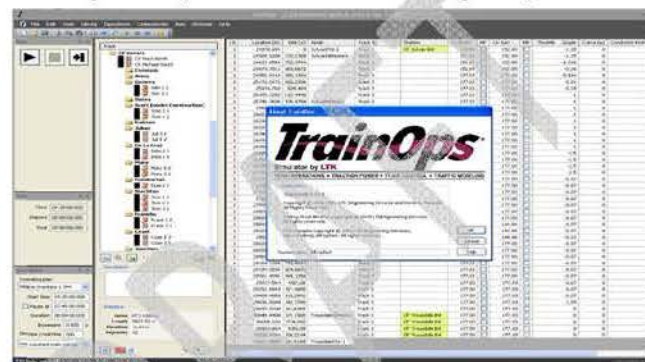
TrainOps was first developed in 1996 by LTK Engineering Services and has been continually enhanced and upgraded in the last 15 years. These enhancements include the addition of new features and ability to model new technologies, as well as adding support for the latest Windows operating systems.

As part of the Caltrain/California HSR assignment, TrainOps was enhanced to support the unique functional attributes of Caltrain’s planned CBOSS PTC system. Each software enhancement, whether a generic upgrade for general purpose modeling or a project-specific upgrade such as that for CBOSS PTC, is subject to extensive internal QA/QC procedures, including 800+ functional tests.

The purpose of these tests is to ensure that all previously approved software functions continue to operate as specified after the addition of new capabilities. These tests use simplified databases designed to rapidly test each software function. In addition, LTK maintains a large database of regression tests, which consist of complex databases designed to verify the correct interaction of multiple software features. Each regression test has an approved “benchmark” set of results that must be replicated in order for a new release of the TrainOps software to be approved.

Figure 1 shows the initial “launch screen” of the TrainOps software.

Figure 1. TrainOps Software Launch Screen and Route Alignment Input Screen



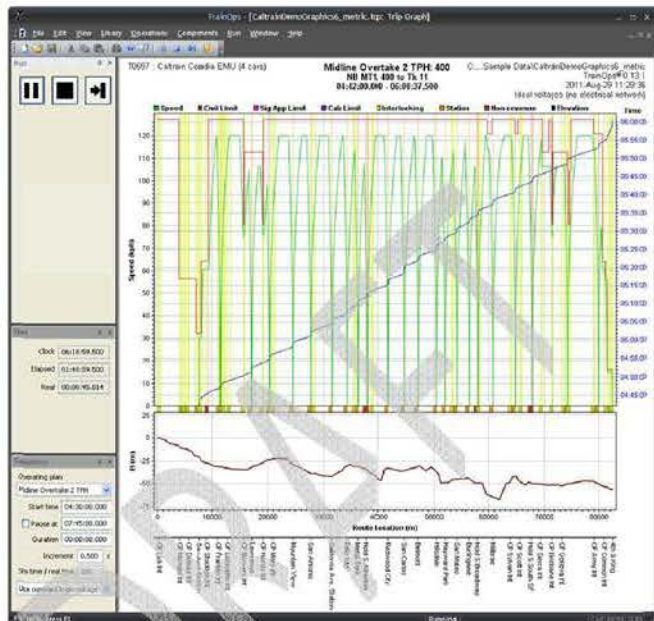
Although TrainOps is not licensed to rail operators or other consulting engineering firms, the software has a long history of successful calibration and application. This history includes application at the following rail systems:

- Mainline Passenger Rail: Amtrak, Denver FasTracks, GO Transit (Toronto), Long Island Rail Road, NJ Transit, SEPTA,
- Heavy Rail: Massachusetts Bay Transportation Authority (Blue, Orange and Red Lines), New York City Transit, and
- Light Rail: Denver, Minneapolis, Phoenix, Portland TriMet, Portland Streetcar, Sacramento, Salt Lake City, Tucson.

Figure 2 shows a typical graphical plot of simulated velocity and simulated travel time.

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Figure 2. TrainOps Simulated Velocity



Note: Simulated Velocity (Green); Maximum Authorized Speed (Red); Time versus Distance Plot (Blue); Vertical Profile (Brown)

Traditional TrainOps analyses start with a calibration and validation effort that confirms simulation model results accurately replicate existing conditions on the rail network to be analyzed. TrainOps has been successfully calibrated to existing operations at MBTA, NYCT, NJ Transit, Amtrak and other rail networks.

For the Caltrain/California HSR Blended Operations Analysis, model calibration was not an appropriate use of resources because all model input variables for the Caltrain Corridor (infrastructure, operating plan, vehicles, train control, dwell times) are changing between today's as-in-service condition and the planned future operating condition. This means that once the future simulation scenarios are initiated, there are no calibration database entries remaining on which to leverage the future scenarios.

Instead, LTK focused on performing sensitivity testing of each model input (using a range of realistic and then extreme inputs), validating that the model responds as expected to each change in input. As part of the TrainOps QA/QC testing, LTK tested the 30 second value and also "extreme" values (0 seconds and 300 seconds) to verify that the model's prediction of delay in the event of a conflicting route responded appropriately for the range of potential inputs.

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Diridon Station

In the vicinity of the San Jose Diridon Station, the design includes dedicated high speed tracks and station platforms. The dedicated two-track HSR alignment continues northward and merges into middle of the Caltrain mainline north of CP De La Cruz. It was assumed in the model that the two Caltrain tracks were spread apart with the HSR tracks accessing the existing Corridor alignment between the Caltrain tracks. The HSR tracks were assumed to merge into the Caltrain tracks using #32.7 turnout geometry, supporting 80 MPH diverging movements for HSR.

Millbrae Station

At Millbrae Station, a four-track configuration is assumed in the simulation model with two station tracks dedicated to HSR trains and two station tracks dedicated to Caltrain trains. The simulation model assumes 80 MPH diverging #32.7 high speed turnouts for HSR to access the 3rd and 4th main tracks, both north and south of Millbrae.

4th and King Station

At the 4th & King terminal Station in San Francisco, dedicated HSR station tracks with extended station platforms are assumed. This requires modifications to the terminal's interlocking layout.

3.1.3 Overtake Track Options

Overtake (passing) locations provide additional tracks to what exists today in limited segments of the corridor to be used by high speed rail trains to bypass Caltrain trains stopping at stations.

The overall guiding criterion for defining overtake segment options is that operational overtakes (one same-direction train passing another) should improve integration of commuter and high speed rail services with neither service being routinely delayed at an overtake location by the other service. Other criteria include:

- Overtake tracks should be located where their construction and operation limit impacts to adjoining communities;
- Overtake tracks being sufficiently long to support 7+ minute travel time difference between commuter and HSR trains; and
- Overtake tracks connecting to existing four-track segments where possible to minimize capital cost.

To achieve a delay-free overtake, the 4-track section contains a minimum of three Caltrain station stops for each train. Since the Caltrain future operating plan tested in this analysis features a skip-stop zone express type operation, the need for each train to make at least three station stops requires that an overtake section include at least five station locations.

In some cases, scheduling delay-free overtakes of commuter trains by HSR requires that additional stops be added to Caltrain in order to create the required 7+ minute travel time difference. These additional stops are undesirable because they increase Caltrain trip times as a result of additional scheduled station stops within the overtake segments.

The minimum 7 minutes of HSR travel time advantage is comprised of:

- 3:00 minimum following move headway (Caltrain is ahead of HSR),
- 0:30 route reestablishment time at overtake diverging interlocking, and
- 0:30 route reestablishment time at overtake merging interlocking, and
- 3:00 minimum following move headway (Caltrain is behind HSR)

Four potential overtake locations have been conceptually defined. They are as follows and reflected in Figure 4:

- 1 The *North Overtake* assumes a 10.2-mile long 4-track segment of tracks from milepost 5 to milepost 15.2. It includes four Caltrain stations and one high speed rail station. They are Bayshore, South San Francisco, San Bruno and Millbrae. The existing 4-track configuration at Bayshore is utilized.
- 2 The *Full Midline Overtake* assumes a 9.1-mile long 4-track segment of tracks from milepost 18.1 to milepost 27.2. It includes five stations – Hayward Park, Hillside, Belmont, San Carlos and Redwood City, all of which are served only by Caltrain. While it is understood that Redwood City is being considered by California High Speed Rail as a possible mid-Peninsula station stop, HSR trains were not programmed to stop there in the simulations. The existing 4-track configuration south of Redwood City is utilized.
- 3 The *Short Midline Overtake* assumes a 6.1-mile long 4-track segment of tracks from milepost 18.1 to milepost 24.2. It includes four Caltrain stations, Hayward Park, Hillside, Belmont and San Carlos, all of which are served only by Caltrain. This option was explored to see what could be achieved if the overtake location was terminated north of Redwood City, avoiding 3rd and 4th track in a portion of the corridor where right of way constraints become more limiting.
- 4 The *South Overtake* assumes a 7.8-mile long 4-track segment of tracks from milepost 33.8 to milepost 41.6. It includes four Caltrain stations, San Antonio, Mountain View, Sunnyvale and Lawrence, all of which are served only by Caltrain. While it is understood that Mountain View is being considered by California High Speed Rail as a possible mid-Peninsula station stop, HSR trains were not programmed to stop there in the simulations. The existing 4-track configuration at Lawrence is utilized.

In addition to the 4-track options, a 3-track option is also being considered. Four tracks allow two dedicated tracks for high speed rail for a limited segment of the

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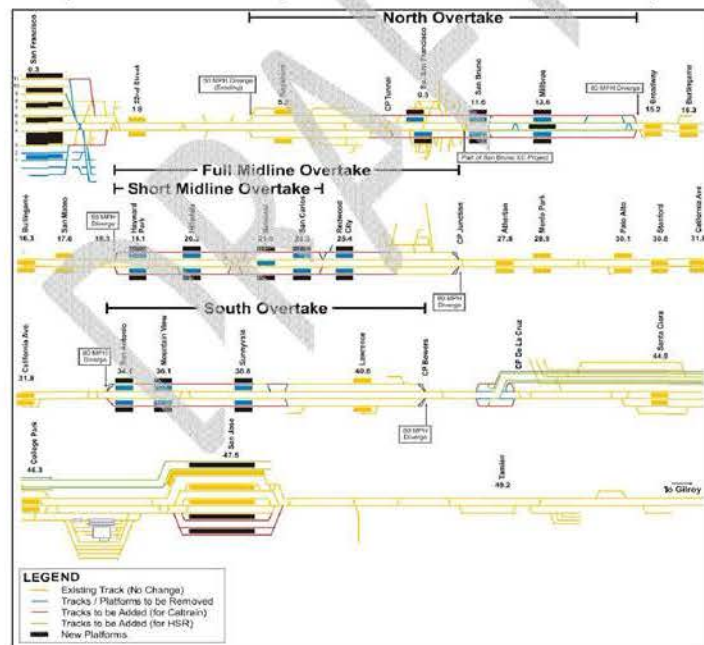
corridor – one track per direction. Three tracks allow one dedicated track for high speed rail for a limited segment of the corridor – one track that must be shared in both directions.

The North, Full Midline and Short Midline Overtakes were analyzed in the simulation model. Analysis of alternative overtake configurations was paused at this point because the Full Midline Overtake (given Caltrain’s tested schedule) shows greater promise in enhancing Corridor capacity and minimizing impacts to Caltrain operations.

Further analysis of all overtake options is required to understand the location options for the overtake tracks along the Caltrain Corridor.

A complete assessment of all of the overtake options will be conducted and provided in a subsequent report.

Figure 4. Track Schematic Showing Baseline Infrastructure with Potential Overtake Trackage



3.1.4 Interlockings

All existing track junctions (interlockings) were assumed to remain in the simulation scenarios. New conceptual interlockings were implemented in the simulation model at 4th & King in San Francisco, at Millbrae, and near CP De La Cruz. Interlockings requiring single #20 turnouts, which support 45 mph diverging movements to another track, were assumed to extend 400 feet from interlocking home signal to home signal. Interlockings requiring single #32.7 high speed turnouts, which support 80 mph diverging movements to another track, were assumed to extend 800 feet from interlocking home signal to home signal.

3.1.5 Track Speed

Two maximum passenger train operating speeds have been tested: (1) up to 79 mph and (2) up to 110 mph for both Caltrain and high speed rail trains. Today, Caltrain trains operate up to 79 mph.

In order to operate trains up to 110 mph, Caltrain’s track structure will need to be upgraded to a higher Federal Railroad Administration (FRA) track class with more stringent maintenance tolerances. This will require system-wide infrastructure improvements.

The specific tested speeds are as follows:

- 79/79: Caltrain and HSR trains operating at up to 79 mph along the corridor;
- 79/110: Caltrain and HSR trains operating at up to 79 mph for most of the corridor, except HSR trains operate at up to 110 MPH on the overtake tracks; and
- 110/110: Caltrain and HSR trains operating at up to 110 mph along the corridor.

In all three tested scenarios, optimal corridor throughput was achieved by having Caltrain and HSR trains operate at the same operating speeds to the greatest extent possible on shared tracks. When both operators are running close to the same speed, it allows for a “free flow” of train traffic for the tested service level maximizing corridor throughput.

In the 79/79 and 110/110 scenario, both Caltrain and HSR trains are operating at similar speeds along the whole corridor.

In the 79/110 scenario, Caltrain and HSR trains travel at similar speeds of up to 79mph on the shared tracks but on the overtake tracks used by HSR trains, HSR trains travel faster, up to 110 mph. Higher speeds on the overtake tracks enhances the corridor throughput by allowing the HSR trains to more efficiently pass the Caltrain trains. Since the differing speed is exclusive to the HSR dedicated tracks only, there are no impacts to the “free flow” of train traffic maximized by sustaining similar speeds of both systems on the shared tracks along most of the corridor.

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3.2 Train Control

3.2.1 Base Assumptions

Caltrain's existing wayside signaling system is assumed as the base of the train control system in the simulation model. The existing system does not have cab signaling or automatic train control.

The existing system generally features three-block, four-aspect control lines, meaning that two trains must be separated by three signal blocks (each about 4,000 to 5,000 feet long) for the following train to experience green ("Clear") signal aspects. The system has automatic signals, indicators along the side of the track that cannot be controlled by the dispatcher and respond automatically to track occupancy status ahead on the Caltrain Corridor.

3.2.2 CBOSS PTC Signal System Overlay Assumptions

In addition to the based train control system, the simulation model assumes an overlay advanced signal system. The advanced signal system is called CBOSS PTC (Communication-Based Overlay Signal System Positive Train Control).

CBOSS PTC, to be implemented by 2015, brings federally mandated safety benefits and performance enhancements to the Caltrain Corridor. PTC is associated with the safety attributes related to collision prevention, civil speed restrictions and roadway worker protection zones. CBOSS is associated with the attributes of the system related improved performance and capacity enhancement.

Unlike most other PTC systems under development in North America, CBOSS PTC is being designed to provide important capacity benefits on the Caltrain Corridor. These benefits emanate from two distinct features of the system. Firstly, CBOSS PTC allows trains on the Caltrain Corridor to approach signals at stop based on their individual braking performance capabilities rather than the "worst case" braking of all trains operating on the Corridor. Secondly, CBOSS PTC provides continuous updates to the train engineer about the occupancy status of the track ahead, rather than providing intermittent information only at wayside signal locations.

The overall capacity of the corridor is governed by the minimum supportable headway (in terms of time) at which the signal system permits two trains to operate at maximum speed. The capacity of each corridor segment is defined by a location-specific minimum supportable headway, with this being a function of train speed, signal layout, station spacing, train stopping patterns and train dwell times at station. The longest resulting interval between trains on the corridor defines overall Caltrain Corridor capacity.

3.2.3 Response Time

Caltrain worked with CHSR in defining appropriate signal system/CBOSS PTC response times assumed in the simulation model. Recognizing that CBOSS PTC is

an overlay system, the response time of both systems must be added together to determine the overall response time for sequential actions of the two systems.

The following are the simulation parameters:

- Response time for signal system/CBOSS PTC - automatic territory – 6 seconds
- Response time for signal system/CBOSS PTC - interlocking territory (fleeting routes) – 14 seconds
- Response time for signal system/CBOSS PTC - interlocking territory (train waiting for conflicting route to clear) – 30 seconds

The 30 second time for reestablishment of a new route includes provisions for loss-of-shunt time, switch movement time, central control communication time, route establishment time and CBOSS PTC processing time.

3.2.4 Determining Minimum Train Intervals

As designed, CBOSS PTC will allow for trains to safely operate closer together than today's wayside signal system. The TrainOps software was used to determine this improvement in signal system capacity. The result of the simulation exercise determined that the minimum supportable headway would decrease from approximately six minutes (realized under the current wayside signal system) to approximately three minutes.

A simulation with two Caltrain trips that depart the terminal at an initial "trial" train interval (headway) of 1:30 (one and half minutes) and then stop and dwell at each station for 30 second dwells was created to assess the minimum system headway under CBOSS PTC.

As the trains are delayed by the CBOSS PTC system, the headway increases to the minimum supportable headway between trains, which is a function of the longest signal block clearing time and CBOSS PTC braking profile on the corridor. The results in Table 1 and Table 2 indicate that a headway of just over three minutes can be scheduled for identical all-stops trains without encountering delay. Figure 5 displays time versus distance plots of the two sets of trains, showing their CBOSS PTC-enforced headway increasing from the initial "trial" train interval to the true minimum supportable train interval of just over three minutes as they operate through the Corridor.

For sections along the Corridor with a higher signal density (shorter signal block lengths), such as from Redwood City to San Jose, the supportable headway is closer.

Included in Table 3 and Table 4, are simulation results showing two trains departing the terminals at a headway of 3:15. Figure 6 shows the time versus distance plot of the two pairs of trains as well. In this case, the trains operate with just one second of delay along the entire corridor, indicating that a headway of 3:16 represents the

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unimpeded minimum supportable headway for all-stops trains on the Corridor under CBOSS PTC. As the blended simulations show, due to the CBOSS PTC profile-based braking to the stop target ahead, variations in stopping patterns become the primary contributing factor to supportable headways along the corridor.

3.2.5 Passing Track Signal Spacing

In sections of new 3rd and 4th main track, automatic signal spacing averaging 3,000 to 4,000 feet was assumed, which is somewhat shorter than the current Caltrain automatic signal block length. Automatic signal block layouts were developed with uniform length, based on constraining fixed interlocking signal locations.

Table 1 – Minimum Supportable Caltrain Corridor CBOSS PTC Headway - Northbound Trains

Station	Lead	Following	Headway	Running Delay to Following Train
San Jose Diridon Station	0:00:00	0:01:30	0:01:30	0:00:00
Santa Clara Station	0:04:44	0:06:57	0:02:13	0:00:43
Lawrence Station	0:09:06	0:11:25	0:02:19	0:00:49
Sunnyvale Station	0:12:19	0:15:11	0:02:52	0:01:22
Mountain View Station	0:15:51	0:18:43	0:02:52	0:01:22
San Antonio Station	0:18:47	0:21:39	0:02:52	0:01:22
California Ave. Station	0:22:02	0:24:55	0:02:53	0:01:23
Palo Alto Station	0:24:45	0:27:38	0:02:53	0:01:23
Menlo Park Station	0:27:05	0:29:58	0:02:53	0:01:23
Atherton Station	0:29:16	0:32:09	0:02:53	0:01:23
Redwood City Station	0:32:31	0:35:35	0:03:04	0:01:34
San Carlos Station	0:35:40	0:38:44	0:03:04	0:01:34
Belmont Station	0:38:02	0:41:06	0:03:04	0:01:34
Hillsdale Station	0:40:44	0:43:49	0:03:05	0:01:35
Hayward Park Station	0:43:01	0:46:05	0:03:04	0:01:34
San Mateo Station	0:45:25	0:48:30	0:03:05	0:01:35
Burlingame Station	0:48:00	0:51:04	0:03:04	0:01:34
Broadway Station	0:50:05	0:53:11	0:03:06	0:01:36
Millbrae Station	0:52:47	0:55:54	0:03:07	0:01:37
San Bruno Station	0:56:08	0:59:14	0:03:06	0:01:36
South SF Station	0:58:58	1:02:05	0:03:07	0:01:37
Bayshore Station	1:04:00	1:07:06	0:03:06	0:01:36
22nd Street Station	1:08:10	1:11:16	0:03:06	0:01:36
4th & King Station	1:13:31	1:16:38	0:03:07	0:01:37

Table 2 – Minimum Supportable Caltrain Corridor CBOSS PTC Headway - Southbound Trains

Station	Lead	Following	Headway	Running Delay to Following Train
4th & King Station	0:00:00	0:01:30	0:01:30	0:00:00
22nd Street Station	0:04:44	0:07:48	0:03:04	0:01:34
Bayshore Station	0:08:59	0:12:03	0:03:04	0:01:34
South SF Station	0:13:57	0:17:01	0:03:04	0:01:34
San Bruno Station	0:16:51	0:19:55	0:03:04	0:01:34
Millbrae Station	0:20:10	0:23:15	0:03:05	0:01:35
Broadway Station	0:22:52	0:25:56	0:03:04	0:01:34
Burlingame Station	0:25:06	0:28:10	0:03:04	0:01:34
San Mateo Station	0:27:35	0:30:39	0:03:04	0:01:34
Hayward Park Station	0:29:58	0:33:02	0:03:04	0:01:34
Hillsdale Station	0:32:16	0:35:20	0:03:04	0:01:34
Belmont Station	0:34:58	0:38:03	0:03:05	0:01:35
San Carlos Station	0:37:19	0:40:23	0:03:04	0:01:34
Redwood City Station	0:40:27	0:43:32	0:03:05	0:01:35
Atherton Station	0:43:44	0:46:48	0:03:04	0:01:34
Menlo Park Station	0:45:55	0:49:00	0:03:05	0:01:35
Palo Alto Station	0:48:16	0:51:21	0:03:05	0:01:35
California Ave. Station	0:50:56	0:54:00	0:03:04	0:01:34
San Antonio Station	0:54:11	0:57:16	0:03:05	0:01:35
Mountain View Station	0:57:09	1:00:13	0:03:04	0:01:34
Sunnyvale Station	1:00:42	1:03:48	0:03:06	0:01:36
Lawrence Station	1:03:54	1:07:00	0:03:06	0:01:36
Santa Clara Station	1:08:10	1:11:18	0:03:08	0:01:38
San Jose Diridon Station	1:13:38	1:16:46	0:03:08	0:01:38

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Table 3 – Simulation of Northbound Trains - With 3:15 Departing Headway

Station	Lead	Following	Headway	Running Delay to Following Train
San Jose Diridon Station	0:00:00	0:03:15	0:03:15	0:00:00
Santa Clara Station	0:04:44	0:07:59	0:03:15	0:00:00
Lawrence Station	0:09:06	0:12:21	0:03:15	0:00:00
Sunnyvale Station	0:12:19	0:15:34	0:03:15	0:00:00
Mountain View Station	0:15:51	0:19:06	0:03:15	0:00:00
San Antonio Station	0:18:47	0:22:02	0:03:15	0:00:00
California Ave. Station	0:22:02	0:25:17	0:03:15	0:00:00
Palo Alto Station	0:24:45	0:28:00	0:03:15	0:00:00
Menlo Park Station	0:27:05	0:30:20	0:03:15	0:00:00
Atherton Station	0:29:16	0:32:31	0:03:15	0:00:00
Redwood City Station	0:32:31	0:35:46	0:03:15	0:00:00
San Carlos Station	0:35:40	0:38:55	0:03:15	0:00:00
Belmont Station	0:38:02	0:41:17	0:03:15	0:00:00
Hillsdale Station	0:40:44	0:43:59	0:03:15	0:00:00
Hayward Park Station	0:43:01	0:46:16	0:03:15	0:00:00
San Mateo Station	0:45:25	0:48:40	0:03:15	0:00:00
Burlingame Station	0:48:00	0:51:15	0:03:15	0:00:00
Broadway Station	0:50:05	0:53:21	0:03:16	0:00:01
Millbrae Station	0:52:47	0:56:02	0:03:15	0:00:00
San Bruno Station	0:56:08	0:59:23	0:03:15	0:00:00
South SF Station	0:58:58	1:02:13	0:03:15	0:00:00
Bayshore Station	1:04:00	1:07:15	0:03:15	0:00:00
22nd Street Station	1:08:10	1:11:25	0:03:15	0:00:00
4th & King Station	1:13:31	1:16:47	0:03:16	0:00:01

Table 4 – Simulation of Southbound Trains With 3:15 Departing Headway

Station	Lead	Following	Headway	Running Delay to Following Train
4th & King Station	0:00:00	0:03:15	0:03:15	0:00:00
22nd Street Station	0:04:44	0:07:59	0:03:15	0:00:00
Bayshore Station	0:08:59	0:12:14	0:03:15	0:00:00
South SF Station	0:13:57	0:17:12	0:03:15	0:00:00
San Bruno Station	0:16:51	0:20:06	0:03:15	0:00:00
Millbrae Station	0:20:10	0:23:25	0:03:15	0:00:00
Broadway Station	0:22:52	0:26:07	0:03:15	0:00:00
Burlingame Station	0:25:06	0:28:21	0:03:15	0:00:00
San Mateo Station	0:27:35	0:30:50	0:03:15	0:00:00
Hayward Park Station	0:29:58	0:33:13	0:03:15	0:00:00
Hillsdale Station	0:32:16	0:35:31	0:03:15	0:00:00
Belmont Station	0:34:58	0:38:13	0:03:15	0:00:00
San Carlos Station	0:37:19	0:40:34	0:03:15	0:00:00
Redwood City Station	0:40:27	0:43:42	0:03:15	0:00:00
Atherton Station	0:43:44	0:46:59	0:03:15	0:00:00
Menlo Park Station	0:45:55	0:49:10	0:03:15	0:00:00
Palo Alto Station	0:48:16	0:51:31	0:03:15	0:00:00
California Ave. Station	0:50:56	0:54:11	0:03:15	0:00:00
San Antonio Station	0:54:11	0:57:26	0:03:15	0:00:00
Mountain View Station	0:57:09	1:00:24	0:03:15	0:00:00
Sunnyvale Station	1:00:42	1:03:57	0:03:15	0:00:00
Lawrence Station	1:03:54	1:07:09	0:03:15	0:00:00
Santa Clara Station	1:08:10	1:11:26	0:03:16	0:00:01
San Jose Diridon Station	1:13:38	1:16:54	0:03:16	0:00:01

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Figure 5. Time-Distance "String" Chart Showing Northbound and Southbound All-Stops Trains Dispatched at Initial 1:30 Headway

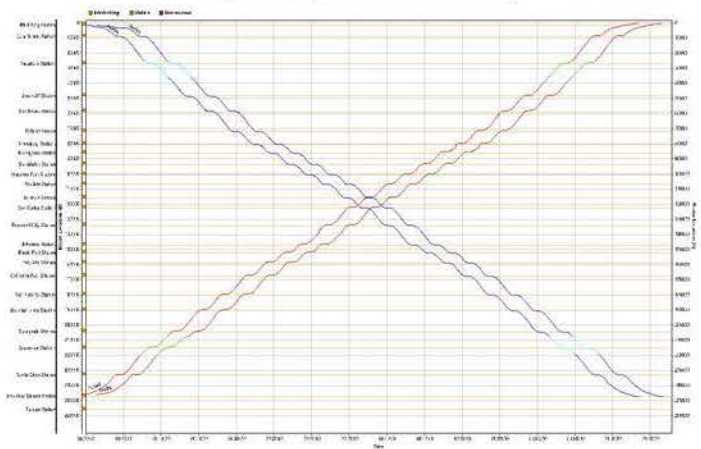
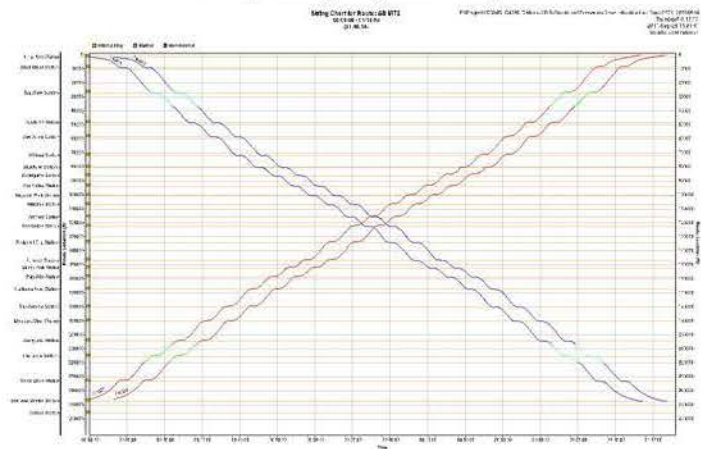


Figure 6. Time-Distance "String" Chart Showing Northbound and Southbound All-Stops Trains Operating on 3:15 Headway



3.3 Rolling Stock

The performance attributes of the future Caltrain and high speed rail vehicles (rolling stock) are detailed below. The specific attributes of each rolling stock type were modeled individually in the simulation, with differences affecting both acceleration and braking rates.

3.3.1 Caltrain

Caltrain is planning to replace its diesel fleet with electric trains called Electric Multiple Units (EMU). EMUs feature individual electric motors on the axles of each car, providing superior acceleration, greater reliability and a smoother ride than the current Caltrain diesel fleet. Commuter railroads in Chicago, New York, New Jersey, Philadelphia and Montreal use EMUs for high capacity, high performance operations. Caltrain is planning to use 8 car trains to augment the seating capacity of an existing 5 car train. EMU performance is based on preliminary specification documents and appropriate derating to reflect engineer conservatism:

- Initial acceleration (0 to 19 MPH) is 1.87 MPHPS with declining acceleration rates at higher velocities based on the tractive effort curve shown in Figure 7,
- Brake rate for station stops (with or without near side grade crossing enforcement) is 1.8 MPHPS,
- Brake rate for signal at stop or stop & proceed is 1.2 MPHPS, and
- Brake rate for civil speed enforcement is 1.2 MPHPS.

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The full service brake rate of the future Caltrain EMU is 2.5 MPHPS. The lower 1.2 and 1.8 MPHPS deceleration rates used in the simulation reflect the enforcement effects of CBOSS PTC as well as engineer conservatism.

Figure 8 displays the acceleration versus velocity curve for the Caltrain EMU, based on performance on level, tangent track. Acceleration at low velocities (up to about 20 MPH) is about 2.1 MPHPS. Table 5 presents the important physical and performance characteristics of the Caltrain Coradia Trainset as simulated in the Blended Operations Analysis.

Figure 7. Alstom Coradia Tractive Effort Curve, Representative of Caltrain EMU Performance

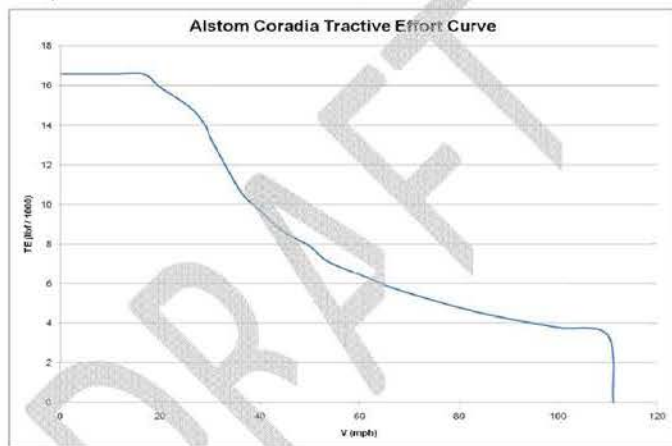
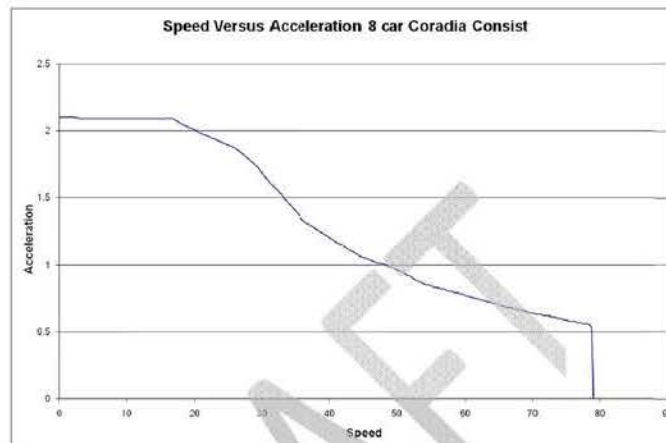


Table 5 – Caltrain Coradia Trainset Physical Characteristics

Description	Value	Unit	Value	Unit	Notes
Frontal Area	13.41	m ²	144.344	ft ²	
Length	213.2	M	699.5	ft	
Empty Weight	517396	Kg	1140663	Lbs	
Design Deceleration	1.1176	m/s ²	2.50	MPHPS	
Braking Distance	1082.04	M	3550	ft	3550 ft. from 110-0 mph.
Open Air Resistance	0.4100	N/(kph ²)	0.2387	lbf/mph ²	AAR Equation.
Maximum Operating Acceleration	0.939	m/s ²	2.1	MPHPS	2.1 MPHPS
Maximum Operating Deceleration	0.894	m/s ²	2.0	MPHPS	2.0 MPHPS

Figure 8. Speed versus Acceleration for Simulated Caltrain EMU



3.3.2 High Speed Rail

The high speed rail trains are based on Siemens "Velaro E" HSR performance data as follows:

- Initial acceleration (0 to 19 MPH) is 1.05 MPHPS with declining acceleration rates at higher velocities, as shown in Figure 9,
- Brake rate for station stops (with or without near side grade crossing enforcement) is 1.5 MPHPS,
- Brake rate for signal at stop or stop & proceed is 1.2 MPHPS, and
- Brake rate for civil speed enforcement is 1.2 MPHPS.

As with the future Caltrain EMU, the full service braking capability of the high speed rail trains is planned to be about 2.5 MPHPS. The lower 1.2 and 1.5 MPHPS deceleration rates used in the simulations reflect the enforcement effects of the CBOSS PTC system, as well as engineer caution.

Table 6 presents the important physical and performance characteristics of the Siemens "Velaro E" High Speed Trainset. The length of a high speed rail trainset used in the simulations is 656 feet (200 meters). The CHSRA has indicated that as ridership demand warrants, the length of the high speed rail trainsets are planned to increase in length up to 1,312 feet (400 meters).

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Figure 9. Siemens Velaro E High Speed Trainset Tractive Effort Curve

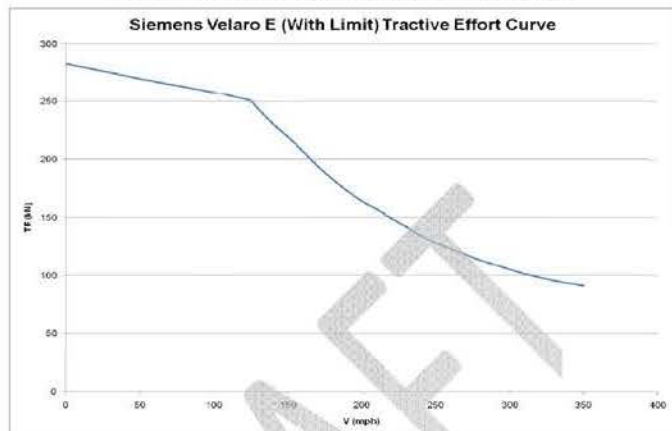


Figure 10. TrainOps and RTC Simulated Accelerations of Siemens Velaro E High Speed Trainset

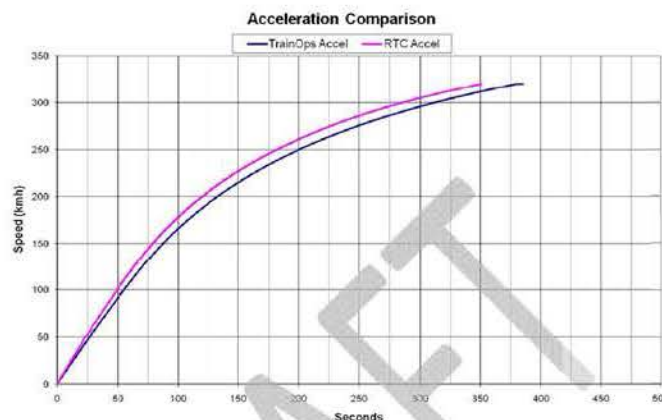


Table 6 – Siemens Velaro E High Speed Trainset Physical Characteristics

Description	Value	Unit	Value	Unit	Notes
Frontal Area	11.4765	m ²	123.524	ft ²	
Length	200	M	656.2	Ft	
Empty Weight	439000	Kg	967829	lbs	
Design Deceleration	0.84	m/s ²	2.10	MPHPS	
Braking Distance	3901.34	M	12800	Ft	Spec: 3900 m from 320-0 km/h
Open Resistance	Air 0.02895	N/(m ² kph ³)	0.02895	lbf/(ft ² mph ³)	Davis Equation.
Maximum Operating Acceleration	1.1176	m/s ²	2.5	MPHPS	2.5 MPHPS
Maximum Operating Deceleration	0.6706	m/s ²	1.5	MPHPS	1.5 MPHPS

Side-by-side comparison of HSR acceleration using LTK’s TrainOps software and the HSR Team’s Rail Traffic Controller software was conducted to ensure consistency of results and to confirm that TrainOps is accurately modeling the high performance (low aerodynamic drag) attributes of HSR trainsets. The comparative results of a close correlation between the two independent software applications are demonstrated in Figure 10.

3.4 Dispatching

3.4.1 Train Priorities

In general, the simulations naturally processed the trains in timetable order, giving priority to trains scheduled earlier versus trains scheduled later at a given interlocking. In rare cases, a Caltrain trip that closely follows high speed rail at Millbrae would request a route at the leaving end of Millbrae Station, effectively trying to overtake high speed rail in this short section of 3rd and 4th main track. Because of the Caltrain Corridor minimum supportable headways and the 30 second route reestablishment time, this dispatching would result in a two to four minute delay to high speed rail which was assumed to be unacceptable. These simulations were revised to reflect strict processing in timetable order, with no overtakes permitted in either direction at Millbrae.

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3.4.2 Station "Hold Out Rule"

At stations specified in the Employee Timetable, Caltrain Operating Rule 6.30 (Rule 6.30) calls for the engineers of two trains approaching a station (with at least one of the trains making a station stop) to coordinate via radio to assure that only one train is in the station at a time. This "hold out" rule is applied at locations where passengers must cross one active track at grade in order to board and alight from trains.

In the model, the following stations, reflective of today's conditions, are assumed to be subject to Rule 6.30 "hold out" operations:

- South San Francisco,
- Broadway,
- Atherton.

The hold out rule applies equally to HSR and Caltrain trips on the Corridor. Where two trains are approaching one of the Rule 6.30 stations at about the same time and one of the trains is not stopping, that train was given priority in the simulation and passed through first. Where both trains are approaching the station and both are stopping, the first train approaching was allowed to enter the station first. The hold out rule does not apply if both approaching trains are passing through the station without stopping.

3.5 Operations

3.5.1 Caltrain

The assumed future Caltrain service plan used in the simulation is six trains per peak hour per direction and two trains per hour off-peak hour per direction. Today, Caltrain operates five trains per peak hour per direction.

The future operating concept serves all Caltrain stations. In contrast with the current operating plan, the Caltrain future operating concept tested in simulation includes no programmed overtakes.

This tested service plan represents only one possible plan. Other operating concepts for future operations will be considered and no official decision has been made with respect to future service levels, dispatching strategies (programmed overtakes), stopping patterns or scheduled trip times.

The Caltrain operating concept that was modeled uses peak period skip stop zone express service strategy, with station stop frequency based on ridership from that location. High ridership stations like Redwood City and Palo Alto receive six trains per hour per direction service, with these locations not only accommodating strong boarding ridership but also serving as transfer points for passengers traveling between two lower ridership stations not served by the same train.

The enhanced performance of the planned EMUs, when compared with the current diesel push-pull performance given the proposed service plan, supports San Francisco-San Jose trip times comparable to the current "Baby Bullet" service.

Table 7 shows a representative 60 minute period of the Caltrain future operating concept in the northbound direction while Table 8 shows the same information for southbound operations. The scheduled times in the tables reflect leaving times, except at the last station.

Table 7 – Peak 60 Minutes Northbound Service - AM Simulated Schedule

	416	418	420	422	424	426
Tamien Station		7:02a			7:32a	
San Jose Diridon Station	7:00a	7:10a	7:20a	7:30a	7:40a	7:50a
College Park Station*						
Santa Clara Station	7:05a			7:35a		
Lawrence Station		7:18a			7:48a	
Sunnyvale Station	7:11a	7:21a	7:30a	7:41a	7:51a	8:00a
Mountain View Station	7:16a	7:26a	7:35a	7:46a	7:56a	8:05a
San Antonio Station			7:38a			8:08a
California Ave. Station	7:21a			7:51a		
Palo Alto Station	7:25a	7:34a	7:44a	7:55a	8:04a	8:14a
Menlo Park Station		7:36a	7:46a		8:06a	8:16a
Atherton Station	7:28a					
Redwood City Station	7:32a	7:43a	7:51a	8:01a	8:13a	8:21a
San Carlos Station			7:54a			8:24a
Belmont Station		7:47a			8:17a	
Hillsdale Station	7:39a	7:50a	7:58a	8:08a	8:20a	8:28a
Hayward Park Station			8:00a			
San Mateo Station	7:42a	7:53a		8:11a	8:23a	
Burlingame Station		7:56a			8:26a	
Broadway Station				8:15a		
Millbrae Station	7:50a	8:01a	8:08a	8:19a	8:31a	8:37a
San Bruno Station			8:12a			8:41a
South SF Station	7:57a			8:26a		
Bayshore Station						8:45a
22nd Street Station			8:19a			
4th & King Station	8:04a	8:14a	8:23a	8:33a	8:44a	8:52a

*Schedule to be determined

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Table 8 – Peak 60 Minutes Southbound Service – AM Simulated Schedule

	417	419	421	423	425	427
4th & King Station	7:00a	7:10a	7:20a	7:30a	7:40a	7:50a
22nd Street Station	7:05a	7:15a	7:25a	7:35a	7:45a	7:55a
Bayshore Station		7:19a				
South SF Station				7:43a		
San Bruno Station		7:27a			7:56a	
Millbrae Station	7:18a	7:30a	7:38a	7:49a	7:59a	8:08a
Broadway Station						8:11a
Burlingame Station		7:34a			8:03a	
San Mateo Station		7:37a	7:44a		8:06a	8:15a
Hayward Park Station		7:39a				
Hillsdale Station	7:27a	7:42a		7:56a	8:10a	
Belmont Station			7:49a			8:20a
San Carlos Station	7:30a	7:45a		8:01a	8:13a	
Redwood City Station		7:51a	7:56a		8:19a	8:27a
Atherton Station					8:22a	
Menlo Park Station	7:39a		8:00a	8:10a		8:31a
Palo Alto Station	7:42a	7:57a		8:03a	8:13a	8:34a
California Ave. Station			8:06a			8:37a
San Antonio Station	7:47a			8:18a		
Mountain View Station	7:51a	8:05a	8:12a	8:22a	8:34a	8:43a
Sunnyvale Station			8:16a			8:47a
Lawrence Station	7:57a			8:28a		
Santa Clara Station	8:02a			8:33a		
College Park Station*						
San Jose Diridon Station	8:07a	8:18a	8:29a	8:38a	8:47a	9:00a
Tamien Station	10:53a		11:53a		12:53p	

*Schedule to be determined

Table 9 – Northbound Service – Midday Simulated Schedule

	448	450	452	454	456	458
Tamien Station		11:27a		12:27p		1:27p
San Jose Diridon Station	11:00a	11:30a	12:00p	12:30p	1:00p	1:30p
College Park Station*						
Santa Clara Station	11:05a	11:35a	12:05p	12:35p	1:05p	1:35p
Lawrence Station	11:09a	11:39a	12:09p	12:39p	1:09p	1:39p
Sunnyvale Station	11:12a	11:42a	12:12p	12:42p	1:12p	1:42p
Mountain View Station	11:17a	11:47a	12:17p	12:47p	1:17p	1:47p
San Antonio Station	11:20a	11:50a	12:20p	12:50p	1:20p	1:50p
California Ave. Station	11:23a	11:53a	12:23p	12:53p	1:23p	1:53p
Palo Alto Station	11:27a	11:57a	12:27p	12:57p	1:27p	1:57p
Menlo Park Station	11:29a	11:59a	12:29p	12:59p	1:29p	1:59p
Atherton Station	11:31a	12:01p	12:31p	1:01p	1:31p	2:01p
Redwood City Station	11:35a	12:05p	12:35p	1:05p	1:35p	2:05p
San Carlos Station	11:38a	12:08p	12:38p	1:08p	1:38p	2:08p
Belmont Station	11:40a	12:10p	12:40p	1:10p	1:40p	2:10p
Hillsdale Station	11:43a	12:13p	12:43p	1:13p	1:43p	2:13p
Hayward Park Station	11:45a	12:15p	12:45p	1:15p	1:45p	2:15p
San Mateo Station	11:47a	12:17p	12:47p	1:17p	1:47p	2:17p
Burlingame Station	11:50a	12:20p	12:50p	1:20p	1:50p	2:20p
Broadway Station	11:52a	12:22p	12:52p	1:22p	1:52p	2:22p
Millbrae Station	11:56a	12:26p	12:56p	1:26p	1:56p	2:26p
San Bruno Station	12:00p	12:30p	1:00p	1:30p	2:00p	2:30p
South SF Station	12:04p	12:34p	1:04p	1:34p	2:04p	2:34p
Bayshore Station	12:05p	12:35p	1:05p	1:35p	2:05p	2:35p
22nd Street Station	12:09p	12:39p	1:09p	1:39p	2:09p	2:39p
4th & King Station	12:13p	12:43p	1:13p	1:43p	2:13p	2:43p

*Schedule to be determined

Table 9 displays a representative sample of the Caltrain operating concept for the off peak for northbound service. Trains operate on half-hourly "clockface" or "memory" schedules, with all trains serving all stations. Every other train serves Tamien.

Table 10 displays the same information for off-peak southbound operations. Scheduled times between San Jose Diridon and Tamien are shorter during off-peak operations than during peak operations due to the need for less schedule recovery during off-peak periods.

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Table 10 – Southbound Service – Midday Simulated Schedule

	449	451	453	455	457	459
4th & King Station	11:00a	11:30a	12:00p	12:30p	1:00p	1:30p
22nd Street Station	11:05a	11:35a	12:05p	12:35p	1:05p	1:35p
Bayshore Station	11:09a	11:39a	12:09p	12:39p	1:09p	1:39p
South SF Station	11:14a	11:44a	12:14p	12:44p	1:14p	1:44p
San Bruno Station	11:18a	11:48a	12:18p	12:48p	1:18p	1:48p
Millbrae Station	11:21a	11:51a	12:21p	12:51p	1:21p	1:51p
Broadway Station	11:24a	11:54a	12:24p	12:54p	1:24p	1:54p
Burlingame Station	11:26a	11:56a	12:26p	12:56p	1:26p	1:56p
San Mateo Station	11:29a	11:59a	12:29p	12:59p	1:29p	1:59p
Hayward Park Station	11:31a	12:01p	12:31p	1:01p	1:31p	2:01p
Hillsdale Station	11:34a	12:04p	12:34p	1:04p	1:34p	2:04p
Belmont Station	11:36a	12:06p	12:36p	1:06p	1:36p	2:06p
San Carlos Station	11:38a	12:08p	12:38p	1:08p	1:38p	2:08p
Redwood City Station	11:44a	12:14p	12:44p	1:14p	1:44p	2:14p
Atherton Station	11:47a	12:17p	12:47p	1:17p	1:47p	2:17p
Mento Park Station	11:49a	12:19p	12:49p	1:19p	1:49p	2:19p
Palo Alto Station	11:52a	12:22p	12:52p	1:22p	1:52p	2:22p
California Ave. Station	11:55a	12:25p	12:55p	1:25p	1:55p	2:25p
San Antonio Station	11:58a	12:28p	12:58p	1:28p	1:58p	2:28p
Mountain View Station	12:02p	12:32p	1:02p	1:32p	2:02p	2:32p
Sunnyvale Station	12:06p	12:36p	1:06p	1:36p	2:06p	2:36p
Lawrence Station	12:09p	12:39p	1:09p	1:39p	2:09p	2:39p
Santa Clara Station	12:14p	12:44p	1:14p	1:44p	2:14p	2:44p
College Park Station*						
San Jose Diridon Station	12:19p	12:49p	1:19p	1:49p	2:19p	2:49p
Tamien Station		12:53p		1:53p		2:53p

*Schedule to be determined

To ensure conservative simulation results, all trains were simulated with a full seated load of 948 passengers (for an 8-car EMU) between all stations.

3.5.2 High Speed Rail

Based on CHSRA input, 4th and King, Millbrae and Diridon stations were assumed to be the three HSR station stops on the Corridor. Millbrae allows convenient connections to BART and the San Francisco International Airport. A two minute dwell time for HSR trains at Millbrae was assumed.

Short of having a high speed rail schedule, the operating plan assumed uniform scheduled headways, which will support “memory” type schedules. Peak period HSR volumes were subject to significant variation in the simulation scenarios, ranging from one to four HSR trains per hour per direction. An off-peak service level of two HSR trains per hour per direction was assumed.

3.5.3 Other Rail Services

In addition to Caltrain and California HSR, Capitol Corridor and ACE trains were modeled in the extreme southern portion of the Corridor between Santa Clara and San Jose Diridon stations. Additional analysis will be conducted separate from this report to assess future higher service planned by Capitol Corridor and ACE. It will also include assessing the compatibility of existing corridor freight services with the blended operations concept.

3.5.4 Schedule Margin

Schedule margin (sometimes referred to as “pad” or “recovery allowance”) is a standard rail scheduling practice to provide for operating variability, maintenance tolerances, longer dwell times due to inclement weather, wheelchair and bike boardings, temporary speed restrictions and other operating variables. An industry standard six percent schedule margin was applied to all train operations, including both interstation run times and dwells.

This margin was enforced as part of the actual train performance, rather than by enforcing train wait times at stations. In other words, the simulation derated acceleration, maximum speed and deceleration such that the result of each simulated interstation run was six percent longer than the corresponding best possible simulation result without schedule margin.

3.5.5 Simulation Duration

Simulations were processed from 4 AM to 1 PM, effectively testing the morning peak period, transitions to and from the morning peak period and a representative three hour off-peak period.

3.5.6 Dwell Times and Randomization

LTK conducted extensive field observations in May of 2011 to quantify the variability in current Caltrain dwell times and to establish averages at each station served. These are shown in Table 11. The field observations were sorted so that only dwells when the train was behind schedule were used in the statistical analysis in order to ensure that no “hold for time” component of dwell time is represented in the statistics.

Current dwell times are based largely on two passenger streams per Caltrain Gallery Car. Future EMUs will support four passenger streams (two double leaf doors at each end of each side of the vehicle), effectively doubling both the passenger boarding and alighting capacity. In order to predict future EMU dwell times, the May 2011 dwell time observations were broken into two parts – “base” dwell time and passenger flow time. The “base” dwell time reflects door open time, door close time, conductor-engineer communication time and train response time to begin moving. The “base” dwell time was assumed to be 17 seconds based on generally accepted industry standards.

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LTK subtracted the “base” dwell time from the May 2011 field observations. Because the passenger flow rate doubles with EMUs, the passenger time of the remaining portion of the dwell observations was cut in half. Finally, the “base” dwell time was added back in to the result used in the simulations. As an example, the Mountain View 2011 field observation average was 64 seconds; the future simulation dwell is 41 seconds. Table 12 shows the simulated dwell time averages, minima and maxima used in the simulations.

Table 11 – May 2011 Field Observations

	Average	Min	Max
22nd Street	0:00:51	0:00:33	0:01:21
Bayshore	0:00:55	0:00:28	0:01:55
Belmont	0:00:57	0:00:34	0:01:55
Burlingame	0:00:46	0:00:33	0:01:03
California Ave.	0:00:51	0:00:27	0:01:14
Hayward Park	0:00:40	0:00:30	0:00:52
Hillsdale	0:00:49	0:00:33	0:01:08
Lawrence	0:00:46	0:00:31	0:01:24
Menlo Park	0:00:55	0:00:34	0:01:38
Millbrae	0:00:53	0:00:42	0:01:04
Mountain View	0:01:04	0:00:47	0:01:47
Palo Alto	0:01:19	0:00:41	0:02:23
Redwood City	0:01:07	0:00:41	0:01:50
San Antonio	0:00:44	0:00:31	0:01:10
San Bruno	0:00:45	0:00:32	0:00:56
San Carlos	0:00:57	0:00:30	0:02:48
San Mateo	0:00:53	0:00:39	0:01:05
Santa Clara	0:00:51	0:00:30	0:01:51
South SF	0:00:53	0:00:32	0:01:55
Sunnyvale	0:01:00	0:00:34	0:01:51
Overall Average	0:00:54	0:00:34	0:01:34

Table 12 – Simulated Values with EMU Dwell Time Improvements (Includes 6% Schedule Margin)

	Average	Min	Max
22nd Street	0:00:36	0:00:36	0:01:01
Bayshore	0:00:47	0:00:33	0:01:19
Belmont	0:00:48	0:00:36	0:01:19
Burlingame	0:00:42	0:00:36	0:00:51
California Ave.	0:00:45	0:00:32	0:00:57
Hayward Park	0:00:39	0:00:34	0:00:46
Hillsdale	0:00:44	0:00:36	0:00:54
Lawrence	0:00:42	0:00:34	0:01:03
Menlo Park	0:00:47	0:00:36	0:01:10
Millbrae	0:00:46	0:00:40	0:00:52
Mountain View	0:00:52	0:00:43	0:01:15
Palo Alto	0:01:00	0:00:40	0:01:34
Redwood City	0:00:54	0:00:40	0:01:16
San Antonio	0:00:41	0:00:34	0:00:55
San Bruno	0:00:42	0:00:35	0:00:48
San Carlos	0:00:48	0:00:34	0:01:47
San Mateo	0:00:46	0:00:39	0:00:52
Santa Clara	0:00:45	0:00:34	0:01:17
South SF	0:00:46	0:00:35	0:01:19
Sunnyvale	0:00:50	0:00:36	0:01:17
Overall Average	0:00:46	0:00:36	0:01:08

Dwell times were randomized in the simulation based on the EMU dwell times shown above. As an example, dwell times for individual simulated trains at Palo Alto ranged from 40 seconds to 1:34 in the simulation with an average dwell time of 1:00.

No other types of simulation input, such as train dispatch times, interlocking route establishment times or vehicle performance, were randomized in the simulations.

3.5.7 Station Stop Types

All trains were dispatched at their scheduled times from their terminal locations in San Francisco and San Jose. “S” (hold for schedule) type stops were used at these locations to ensure schedule adherence. At all other locations, trains were simulated with “D” (depart when ready) stops, given the lack of specific Caltrain and HSR scheduled times at each station for each trip in each scenario.

4 Operations Analysis Results

Summary: This chapter describes the incremental approach that was followed in the development of the blended operations scenarios as well as the simulation results, organized by tested speed scenarios. The three tested speed scenarios were 79/79, 79/110 and 110/110 (Caltrain/HSR). Results are shown by each of the tested blended operations service level and include model outputs: travel time; signal delay; Caltrain service intervals (train headways); and assumed infrastructure.

4.1 Simulation Process

The simulation modeling results reflect the incremental approach in the development of the blended operations scenarios. The first results presented are the “6/0” scenarios (6 Caltrain and 0 HSR trains per peak hour per direction), then layered in additional HSR trains.

HSR frequencies were increased from an initial service level of 1 train per hour per direction (“6/1” scenarios) to up to 4 trains per hour (“6/4” scenarios, bringing total Corridor train volumes to 10 trains per hour per direction).

At the same, varying maximum operating speeds and assumed infrastructure were also tested, with each scenario changing only one variable (train volume, infrastructure or maximum operating speed) at a time so that the impact of the change could be precisely understood.

Where a simulated train volume in a given scenario resulted in unacceptable train congestion and delays for a given infrastructure and a given maximum operating speed, the follow-on simulation scenarios with higher train volumes appropriately included additional infrastructure or changes in maximum operating speeds to eliminate the unacceptable train congestion and delays.

This incremental “three dimensional matrix” of service level, maximum train speed and infrastructure produced a very large number of potential scenarios, which was limited to a number that could be simulated in a reasonable time by using the results of initial scenarios to guide the study team in identifying subsequent scenarios that showed promise blended operations having conceptual feasibility.

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Table 13 provides an at-a-glance chart that identifies the tested blended operations simulation scenarios. The infrastructure features are as described in Section 4.2 (79/79 mph scenarios), Section 4.3 (79/110 scenarios) and Section 4.4 (110/110 mph scenarios).

Five potential infrastructure overtake options were conceptually defined as described in Section 3.1.3. These include: North Overtake, Full Midline Overtake, Short Midline Overtake, South Overtake and a 3-track option.

Table 13 and the subsequent sections in this chapter focus on the Full and Short Midline Overtake options. Assessment of the remaining three infrastructure options (North Overtake, South Overtake and the 3-track option) will be completed and the results of those simulations will be presented in a subsequent report.

Caltrain/ HSR Trains per Hour per Direction	Infrastructure
79/79 Scenarios	
6/0	Baseline HSR Infrastructure
6/1	Baseline HSR Infrastructure
6/2	Baseline HSR Infrastructure
6/3	Baseline HSR Infrastructure
6/3	Full Midline 4 Track
6/4	Full Midline 4 Track
6/3	Short Midline 4 Track
6/4	Short Midline 4 Track
79/110 Scenarios	
6/3	Full Midline 4 Track
6/4	Full Midline 4 Track
6/3	Short Midline 4 Track
6/4	Short Midline 4 Track
110/110 Scenarios	
6/0	Baseline HSR Infrastructure
6/2	Baseline HSR Infrastructure
6/3	Baseline HSR Infrastructure
6/3	Full Midline 4 Track
6/4	Full Midline 4 Track
6/3	Short Midline 4 Track
6/4	Short Midline 4 Track

4.2 Analysis by Speed - 79/79 Scenarios

4.2.1 Without Overtake Tracks

The 79/79 simulations with Baseline Infrastructure (existing Caltrain ROW, HSR stations and no 3rd and 4th track for overtakes) were processed with peak period 6/0 (no HSR), 6/1, 6/2 and 6/3 Caltrain/HSR service levels.

To support HSR trains, the six peak hour Caltrain trips in each direction had to be clustered in order to create one or more "slots" for HSR. In the 6/2 scenario, clusters of three Caltrain trips followed by a HSR trip operated. In the 6/3 scenario, clusters of two Caltrain trips followed by a HSR trip operated.

This scheduling strategy can be seen graphically in the time-distance string charts shown in Figure 12 (6/1), Figure 13 (6/2) and Figure 14 (6/3). These three figures should be contrasted with the time-distance string chart shown in Figure 11 which shows the nearly uniform 10-minute Caltrain headways in each direction of the 6/0 scenario. All string charts are included in Appendix A.

Closer headways are required (and are supported by the planned CBOSS PTC system) between Caltrain trips as the number of HSR trains on the corridor increases. HSR trains are unable to operate for the length of the corridor without ending up behind a stopping Caltrain trip. The delays to HSR trains are most severe in the off-peak periods where Caltrain operates all-stop trains.

For the 6/1 and 6/2 Baseline Infrastructure scenarios, the delays do not cause problems for Caltrain service, but do increase the average travel time for HSR service. Increasing the number of HSR trains to three per hour per direction (the 6/3 Baseline Infrastructure scenario) begins to cause cascading delays to Caltrain service during the peak period. Caltrain trips delay HSR trips that, in turn, delay following Caltrain trips. The 6/3 Baseline Infrastructure scenario is operating beyond the practical capacity of the corridor and not a viable option.

4.2.2 With Overtake Tracks

With North Overtake Tracks

The simulation of the North Overtake segment found that the Bayshore to Millbrae four station segment had difficulty supporting the required 7+ minute travel time difference. A major contributing factor to the lack of a 7+ minute travel time difference at the North Overtake is the fact that HSR trains will stop at Millbrae Station and will require a longer dwell (estimated to be 2 minutes) than Caltrain due to fewer doors per car and the need to accommodate passengers with luggage.

A significant number of additional Caltrain stops at Bayshore, South San Francisco and San Bruno stations that presently have low ridership would be required in order

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to accomplish reliable overtakes. The simulation results showed increased trip times for Caltrain passengers and a less effective overtake location for HSR than the Full Midline Overtake due to increasing maximum waiting times for Caltrain trains due to less regular service intervals than the Full Midline Overtake.

Because of these initial results, that may be unacceptable to Caltrain, further study of the North Overtake section and its tangible operating impacts to Caltrain and HSR service was deferred, to be considered at a later phase of this study.

With Full Midline Overtake Tracks

Many of the operating difficulties of the Baseline Infrastructure simulation scenarios are eliminated under the 79/79 scenarios with the Hayward Park to Redwood City Midline Overtake (the Full Midline Overtake). With HSR trains able to overtake Caltrain trips, the required gaps between Caltrain trips for HSR do not need to be as large. HSR trains can effectively make use of twice the Caltrain headway over the length of the corridor (gaining on one Caltrain trip before the Midline Overtake and the previous Caltrain trip after the Midline Overtake).

For example, a Caltrain service gap at Palo Alto of 19 minutes is required in the 79/79 6/2 Baseline Infrastructure scenario, whereas the maximum service gap there in the 79/79 6/2 Midline Overtake scenario is just 11 minutes. Even when HSR service is increased to the 79/79 6/4 service level, the Midline Overtake scenario limits the maximum Palo Alto Caltrain time between trains to 14 minutes.

Almost all of the delay to HSR trains is eliminated in the scenarios with up to three HSR trains per hour. Under the 6/4 scenario with Midline Overtake scenario, the delays are manageable with little negative impact on average travel time.

With Short Midline Overtake Tracks

The 79/79 scenario results using the shorter Hayward Park to Whipple Avenue Midline Overtake show that many of the operational advantages of the full Midline Overtake are achieved, but more significant changes to Caltrain service are necessary for delay-free operation. Since there is less distance in which the HSR overtake of Caltrain can occur, all overtaken trains must stop at a minimum of three of the four stations within the overtake trackage for delay-free operation.

The absence of Redwood City Station – where all Caltrain trips are scheduled to stop in the future operating plan simulated – in the shorter Midline Overtake scenarios makes the operation significantly more challenging. The addition of new scheduled stops for overtaken Caltrain trips has the effect of increasing the average Caltrain travel time in the short Midline Overtake scenarios. See Appendix A, Tables 20 and 21, for the northbound and southbound operating plan changes required in order to obtain reliable operations for the short version of the Midline Overtake during peak periods.

Simulation Results

Table 14 and Table 15 below detail the simulation results for each of the 79/79 scenarios with separate statistics for Caltrain and for HSR. The statistics reflect overall averages for all of the trains operating during the morning peak period.

For Caltrain, all scenarios support an average San Jose to San Francisco simulated trip time of 59 to 61 minutes, with most train trips arriving 2 to 3 minutes ahead of schedule. Signal delay reflects the number of minutes and seconds that the total population of simulated trains (morning peak period and midday) is operating at reduced speed or stopped because of congestion ahead. When divided by the number of peak period Caltrain trips (36), the per-train delays are quite modest. Only the 6/3 Baseline Infrastructure scenario signal delay is of concern, as it reflects some cascading delays of Caltrain delaying HSR and HSR then delaying Caltrain.

Caltrain/HSR Service Level	Trip Times (H:M:S)	Signal Delay (H:M:S)	Caltrain Peak Hour Service Intervals (at Palo Alto NB) (Minutes)	Infrastructure Assumed in Simulation
6/0	0:59:53	0:02:12	10/9/11/9/9/12	Baseline HSR Infrastructure
6/1	0:59:56	0:01:44	10/5/7/17/9/12	Baseline HSR Infrastructure
6/2	0:59:56	0:02:49	19/5/7/17/5/7	Baseline HSR Infrastructure
6/3	0:59:58	0:11:03	6/15/6/13/5/16	Baseline HSR Infrastructure
6/3	0:59:58	0:01:00	12/6/12/9/11/10	Full Midline 4 Track
6/4	1:00:13	0:01:36	6/14/10/4/14/12	Full Midline 4 Track
6/3	1:00:13	0:05:12	14/5/14/7/15/5	Short Midline 4 Track
6/4	1:00:41	0:02:45	6/9/15/5/10/15	Short Midline 4 Track

For HSR, San Francisco to San Jose simulated trip times shown in Table 15 range from 45 to 49 minutes with the 6/3 Baseline Infrastructure scenario having an average trip time a minute longer than the next highest average trip time scenario. Again, this points to the significant congestion in that scenario, as evidenced by the more than 90 minutes of total signal delay experienced by the 18 HSR trains operating in that scenario during the peak period.

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Table 15 – HSR Simulation Results
Speed: 79/79 (Caltrain/HSR)

Caltrain/ HSR Service Level	Trip Times (H:M:S)	Signal Delay (H:M:S)	Infrastructure Assumed in Simulation
6/1	0:47:56	0:20:33	Baseline HSR Infrastructure
6/2	0:46:37	0:20:59	Baseline HSR Infrastructure
6/3	0:48:56	1:34:10	Baseline HSR Infrastructure
6/3	0:45:14	0:17:01	Full Midline 4 Track
6/4	0:45:51	0:29:14	Full Midline 4 Track
6/3	0:44:50	0:02:13	Short Midline 4 Track
6/4	0:45:20	0:16:48	Short Midline 4 Track

4.3 Analysis by Speed - 79/110 Scenarios

The 79/110 scenarios are identical to the 79/79 scenarios except that HSR trains are permitted to operate at up to 110 MPH (where supported by track geometry) in the overtake segments and up to 79 MPH outside of the overtake segments. By definition, 79/110 scenarios exist only with overtake infrastructure.

In the 79/110 overtake simulations, the results were much the same as the 79/79 simulation scenarios with the largest difference being the enhanced reliability of the overtake and a correspondingly lower number of stops required for overtaken trains.

The ability of HSR trains to operate at up to 110 MPH in the overtake areas produced more reliable overtakes than under the comparable 79/79 scenario. The faster average HSR travel time over the corridor required a small number of stops to be exchanged between trips approaching the terminals, moving stops from a Caltrain trip being followed by an HSR trip to a train that had been overtaken.

Table 16 presents the Caltrain simulation statistics for the 79/110 scenarios. Caltrain trip times are virtually identical to the 79/79 scenarios as there is no change in those trains' maximum authorized speeds. Signal delay for all scenarios is virtually zero on a per-train basis. The longest intervals between trains, as measured at Palo Alto northbound (NB), are 14 minutes (in the 6/4 full Midline Overtake and the 6/3 Short Midline Overtake), which is only a small increase over the 12 minute interval experienced in the 6/0 Baseline Infrastructure scenario.

Table 16 – Caltrain Simulation Results
Speed: 79/110 (Caltrain/HSR - Only on Overtake Track)

Caltrain/ HSR Service Level	Trip Times (H:M:S)	Signal Delay (H:M:S)	Caltrain Hour Intervals (at Palo Alto NB) (Minutes)	Peak Service	Infrastructure Assumed in Simulation
6/3	0:59:57	0:03:47	12/7/13/7/11/10		Full Midline 4 Track
6/4	0:59:52	0:06:07	5/12/12/5/12/14		Full Midline 4 Track
6/3	0:59:50	0:03:30	13/5/14/7/12/9		Short Midline 4 Track
6/4	1:00:11	0:00:00	7/11/12/6/11/13		Short Midline 4 Track

For HSR, the 110 MPH maximum operating speed (within the overtake trackage limits only) provides a modest travel time benefit. Whereas the 79/79 average simulated trip times range from 45 to 49 minutes, Table 17 indicates that the 79/110 average simulated trip times are all about 43 minutes for HSR trains (all HSR trip times include a two-minute stop at Millbrae and six percent schedule margin for the entire run). When measured on a per-train basis, no HSR train experiences more than one minute of signal delay on its San Francisco to San Jose trip.

Table 17 – HSR Simulation Results
Speed: 79/110 (Caltrain/HSR - Only on Overtake Track)

Caltrain/ HSR Service Level	Trip Times (H:M:S)	Signal Delay (H:M:S)	Infrastructure Assumed in Simulation
6/3	0:43:12	0:15:41	Full Midline 4 Track
6/4	0:43:14	0:18:39	Full Midline 4 Track
6/3	0:43:26	0:01:15	Short Midline 4 Track
6/4	0:43:51	0:18:02	Short Midline 4 Track

4.4 Analysis by Speed - 110/110 Scenarios

4.4.1 Without Overtake Tracks

For the 110/110 Baseline Infrastructure simulation with 6/0 service level (no HSR), the Caltrain 79/79 6/0 operating plan required significant changes to eliminate following move delays (a Caltrain trip delaying a following trip). Due to Caltrain's skip stop zone express schedule tested in the simulations, a train skipping a stop would often close in upon the preceding train on an alternate pattern. By adjusting the schedule patterns to keep the Caltrain trip times approximately equal, it was possible to eliminate all of this delay in the 110/110 6/0 scenario.

It should be noted that the higher speeds in the 110 mph simulation mean that a greater safe braking distance is required by the CBOSS PTC system than is the case under 79 MPH operation.

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The operating challenges with creating a delay-free Caltrain schedule under 6/0 carry over to the Baseline Infrastructure simulations with 6/2 and 6/3 levels of HSR service. With a much shorter trip time under a 110 MPH maximum speed, HSR trains close in on Caltrain trips faster than under the comparable 79/79 scenarios.

This has the effect of significantly increasing the total delay for HSR. The 6/2 Baseline Infrastructure HSR signal delay is more than 60 minutes of total delay for the entire group of simulated trains over the morning peak period (versus 21 minutes for the comparable scenario under 79/79).

4.4.2 With Full Midline Overtake Tracks

For the 110/110 Hayward Park to Redwood City Midline overtake simulations, the overtake itself was possible without delay. However, many schedule modifications to Caltrain trips were necessary to prevent delays before and after the overtake because of the pronounced travel time difference between HSR and Caltrain trips.

While no additional stops were necessary, schedule patterns were necessarily adjusted to keep overtaken trains running faster prior to the overtake and slower after the overtake. Similarly, trains that were not overtaken were made to run slower prior to the overtake and faster thereafter, strategies to keep from delaying HSR trains. See Appendix A, Table 22 and Table 23, for the northbound and southbound operating plan changes that were required in order to obtain reliable operations for the 110/110 scenario during the peak periods.

4.4.3 With Short Midline Overtake Tracks

In the 110/110 Hayward Park to Whipple Avenue Midline Overtake simulation, the reduced overtake length required additional deviations from the original Caltrain schedule pattern in the southern half of the schedule. The increased two-track shared use corridor distance from Whipple Avenue to San Jose Diridon, makes it very difficult for a 110 mph train to leave San Jose without encountering delay prior to reaching the overtake, and for a southbound HSR train to keep from being delayed by the Caltrain train it follows after the overtake. Since all Caltrain trips stop at Redwood City, which is not part of the overtake, a northbound HSR train needs either a longer scheduled headway leaving San Jose or, if that is not possible, for the overtaken train to make fewer stops prior to the overtake.

4.4.4 Simulation Results

Table 18 and Table 19 below detail the simulation results for each of the 110/110 scenarios with separate statistics for Caltrain and for HSR. The statistics reflect overall averages for all of the trains operating during the morning peak period.

The Caltrain terminal-to-terminal trip times range from 56 to 57 minutes, a reduction of 3 to 4 minutes from the 79/79 simulation scenarios.

Table 18 – Caltrain Simulation Results
Speed: 110/110 (Caltrain/HSR)

Caltrain/ HSR Service Level	Trip Times (H:M:S)	Signal Delay (H:M:S)	Caltrain Peak Hour Service Intervals (at Palo Alto NB) (Minutes)	Infrastructure Assumed in Simulation
6/0	0:56:42	0:01:31	9/8/13/9/9/12	Baseline HSR Infrastructure
6/2	0:56:42	0:02:12	18/5/6/18/5/8	Baseline HSR Infrastructure
6/3	0:57:01	0:31:19	15/6/14/5/13/7	Baseline HSR Infrastructure
6/3	0:56:40	0:00:09	14/5/13/6/14/8	Full Midline 4 Track
6/4	0:56:27	0:02:36	5/11/14/4/12/14	Full Midline 4 Track
6/3	0:56:35	0:06:57	15/5/14/5/14/7	Short Midline 4 Track
6/4	0:56:31	0:01:01	5/11/14/4/11/15	Short Midline 4 Track

Table 19 – HSR Simulation Results
Speed: 110/110 (Caltrain/HSR)

Caltrain/ HSR Service Level	Trip Times (H:M:S)	Signal Delay (H:M:S)	Infrastructure Assumed in Simulation
6/2	0:41:30	1:04:03	Baseline HSR Infrastructure
6/3	0:43:35	2:15:12	Baseline HSR Infrastructure
6/3	0:37:24	0:10:17	Full Midline 4 Track
6/4	0:38:35	0:44:24	Full Midline 4 Track
6/3	0:38:02	0:19:50	Short Midline 4 Track
6/4	0:39:20	0:52:15	Short Midline 4 Track

The HSR San Francisco to San Jose trip times (with appropriate schedule margin and a two-minute stop at Millbrae included) are about 37 to 39 minutes in the 110/110 scenarios. This can be compared to the 45-48 minute range for the 79/79 scenarios, and to about 43 minutes in the 79/110 scenarios.

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5 Conclusion

Based on the results of the TrainOps simulation model customized for application to the Caltrain and high speed rail operations analysis, a blended operation where Caltrain and high speed rail trains share tracks is conceptually feasible.

This report only addresses the finding that blended operations on the Caltrain Corridor are conceptually feasible. The report is not intended to define what the blended system is. It provides a "proof of concept" for a blended system in the Caltrain Corridor. Subsequent work to be completed includes: engineering, identifying maintenance needs, cost estimating, ridership forecasts and environmental clearance.

Assuming electrification with the CBOSS PTC system and EMU electric rail vehicles – a system with superior performance attributes from that of today's diesel-powered system – the Corridor can support up to 10 trains per peak hour per direction. This is double the train traffic that is being operated today.

The blended system with Caltrain scheduling strategies and no passing tracks can reliably support up to 6 Caltrain trains and 2 high speed rail trains per peak hour per direction. With additional overtake tracks, the blended system can support up to 6 Caltrain trains and 4 high speed rail trains per peak hour per peak direction.

If train speeds can be increased up to 110 mph, travel times can be reduced. High speed rail trains experience greater travel time savings. Caltrain trips, making more station stops than high speed rail (and therefore having fewer opportunities to attain maximum speed between station stops), would experience less travel time savings.

Building on this "proof of concept", there is more analysis to be done. Additional analysis will include completion of the overtake track options at various locations along the corridor and an assessment of alternative service plan/operations variables. These efforts will be conducted over the next several months and be used to further inform the definition of the blended system.

6 Appendix A – Caltrain Tested Schedule Modifications

Table 20 presents the northbound operating plan changes required in order to obtain reliable operations for the short version of the Midline Overtake during peak periods under the 6/4 79/79 scenario. In general, station stops were added to Caltrain trips, increasing overall trip time, in order to achieve the necessary minimum 7 minute travel time difference between HSR and Caltrain trips being overtaken. During the peak hour, a total of 5 additional Caltrain station stops – distributed across the 6 trains per hour in the simulation and not otherwise included in the future operating plan assumed for simulation -- is needed in the northbound direction to achieve reliable overtakes.

Table 20 – Revisions to AM Peak Hour Stopping Patterns of Tested Schedule to Accommodate 79/79 Hayward Park to Whipple Avenue (MP 24.3) Midline – Northbound

Caltrain trains:	416	418	420	422	424	426
Overtaken by HSR trains:		HSR16	HSR18		HSR20	HSR22
Tamien Station					*	
San Jose Diridon Station	*	*	*	*	*	*
College Park Station*						
Santa Clara Station	*			*		
Lawrence Station		*			*	
Sunnyvale Station	*	*	*	*	*	*
Mountain View Station	*	*	*	*	*	*
San Antonio Station			*			*
California Ave. Station	*			*		
Palo Alto Station	*	*	*	*	*	*
Menlo Park Station	○	X	*	○	X	*
Atherton Station	X		○			
Redwood City Station	*	*	*	*	*	*
San Carlos Station		○	*		○	*
Belmont Station	*	*	○	*	*	○
Hillsdale Station	*	*	*	*	*	*
Hayward Park Station			*			○
San Mateo Station	*	*	○	X	*	
Burlingame Station		*			*	
Broadway Station				*		
Millbrae Station	*	*	*	*	*	*
San Bruno Station			*			*
South SF Station	X	○		X	○	
Bayshore Station						*
22nd Street Station			*			*
4th & King Station	*	*	*	*	*	*

X Station stop removed from originally-developed Caltrain operating plan to accommodate HSR.
 * Station stop in originally-developed Caltrain operating plan that remains in 79/79 Hayward Park to Whipple Avenue Midline HSR scenarios.
 ○ Station stop not in originally-developed Caltrain operating plan that was added to accommodate HSR.
 *Schedule to be determined

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Table 21 presents the same information for the southbound direction for the 6/4 79/79 scenario with the Short Midline Overtake.

Table 21 – Revisions to AM Peak Hour Stopping Patterns of Tested Schedule to Accommodate 79/79 Hayward Park to Whipple Avenue (MP 24.3) Midline – Southbound						
Caltrain trains:	417	419	421	423	425	427
Overtaken by HSR trains:	HSR15	HSR17		HSR19		HSR21
4th & King Station	*	*	*	*	*	*
22nd Street Station	*	*	*	*	*	*
Bayshore Station	*	*	*	*	*	*
South SF Station				*		
San Bruno Station		*			*	
Millbrae Station	*	*	*	*	*	*
Broadway Station						X
Burlingame Station		*			*	
San Mateo Station	O	*	X	O	X	*
Hayward Park Station		*		O		
Hillsdale Station	*	*	*	*	*	*
Belmont Station	O	*	*	*	*	*
San Carlos Station	*	*	*	*	X	O
Redwood City Station		*	*	*	*	*
Atherton Station		*	*	*	*	*
Menlo Park Station	*	*	*	*	*	*
Palo Alto Station	*	*	*	*	*	*
California Ave. Station		*	*	*	*	*
San Antonio Station	*	*	*	*	*	*
Mountain View Station	*	*	*	*	*	*
Sunnyvale Station		*	*	*	*	*
Lawrence Station	*	*	*	*	*	*
Santa Clara Station	*	*	*	X	O	*
College Park Station*	*	*	*	*	*	*
San Jose Diridon Station	*	*	*	*	*	*
Tamien Station	*	*	*	*	*	*

X Station stop removed from originally-developed Caltrain operating plan to accommodate HSR.
 * Station stop in originally-developed Caltrain operating plan that remains in 79/79 Hayward Park to Whipple Avenue Midline HSR scenarios.
 O Station stop not in originally-developed Caltrain operating plan that was added to accommodate HSR.
 *Schedule to be determined

Table 22 shows how the initially tested Caltrain zone express skip stop operating plan was altered during the peak 60 minutes to accommodate the 110/110 scenario HSR operations with a minimum of following move delay to HSR in the northbound direction. Table 23 shows the same information for the southbound direction.

Table 22 – Revisions to AM Peak Hour Stopping Patterns of Tested Schedule to Accommodate 110/110 Hayward Park to Redwood City Midline – Northbound						
Caltrain train:	416	418	420	422	424	426
Overtaken by HSR train:	HSR16	HSR18		HSR20	HSR22	
Tamien Station	*	*	*	*	*	*
San Jose Diridon Station	*	*	*	*	*	*
College Park Station*	*	*	*	*	*	*
Santa Clara Station	*	*	*	*	*	*
Lawrence Station	*	*	*	*	*	*
Sunnyvale Station	*	*	*	*	*	*
Mountain View Station	*	*	*	*	*	*
San Antonio Station	*	*	*	*	*	*
California Ave. Station	*	*	*	*	*	*
Palo Alto Station	*	*	*	*	*	*
Menlo Park Station	*	*	*	*	*	*
Atherton Station	*	*	*	*	*	*
Redwood City Station	*	*	*	*	*	*
San Carlos Station	*	*	*	*	*	*
Belmont Station	*	*	*	*	*	*
Hillsdale Station	*	*	*	*	*	*
Hayward Park Station	*	*	*	*	*	*
San Mateo Station	X	*	O	X	*	O
Burlingame Station	*	*	*	*	*	*
Broadway Station	*	*	*	X	O	*
Millbrae Station	*	*	*	*	*	*
San Bruno Station	*	*	*	*	*	*
South SF Station	X	O	*	X	O	*
Bayshore Station	*	*	*	*	*	*
22nd Street Station	*	*	*	*	*	*
4th & King Station	*	*	*	*	*	*

X Station stop removed from originally-developed Caltrain operating plan to accommodate 110/110 HSR.
 * Station stop in originally-developed Caltrain operating plan that remains in 110/110 HSR scenarios.
 O Station stop not in originally-developed Caltrain operating plan that was added to accommodate 110/110 HSR.
 *Schedule to be determined

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Table 23 – Revisions to AM Peak Hour Stopping Patterns of Tested Schedule to Accommodate 110/110 Hayward Park to Redwood City Midline – Southbound

Caltrain train:	417	419	421	423	425	427
Overtaken by HSR train:	HSR15	HSR17		HSR19	HSR21	
4th & King Station	*	*	*	*	*	*
22nd Street Station	*	*	*	*	*	*
Bayshore Station	*	*	*	*	*	*
South SF Station				*		
San Bruno Station		*	*	*	*	*
Millbrae Station	*	*	*	*	*	*
Broadway Station					*	*
Burlingame Station		*	*	*	*	*
San Mateo Station		*	*	*	*	*
Hayward Park Station		*	*	*	*	*
Hillsdale Station	*	*	*	*	*	*
Belmont Station		*	*	*	*	*
San Carlos Station	*	*	*	*	*	*
Redwood City Station		*	*	*	*	*
Atherton Station				*	*	*
Menlo Park Station	*	*	*	*	*	*
Palo Alto Station	*	*	*	*	*	*
California Ave. Station		*	*	*	*	*
San Antonio Station	*	*	*	*	*	*
Mountain View Station	*	*	*	*	*	*
Sunnyvale Station		*	*	*	*	*
Lawrence Station	X	O		X	O	
Santa Clara Station	*	*	*	*	*	*
College Park Station		*	*	*	*	*
San Jose Diridon Station	*	*	*	*	*	*
Tamien Station	*	*	*	*	*	*

X Station stop removed from originally-developed Caltrain operating plan to accommodate 110/110 HSR.
 * Station stop in originally-developed Caltrain operating plan that remains in 110/110 HSR scenarios
 O Station stop not in originally-developed Caltrain operating plan that was added to accommodate 110/110 HSR.
 *Schedule to be determined

7 Appendix B – Time-Distance String Charts

Time-Distance String Chart Color Legend

- Northbound Caltrain Main Track
- Southbound Caltrain Main Track
- Northbound HSR Main Track Including Overtake Track
- Southbound HSR Main Track Including Overtake Track
- Existing Northbound Caltrain "Siding" Track at Lawrence and Bayshore
- Existing Southbound Caltrain "Siding" Track at Lawrence and Bayshore

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7.1 Morning Peak Period

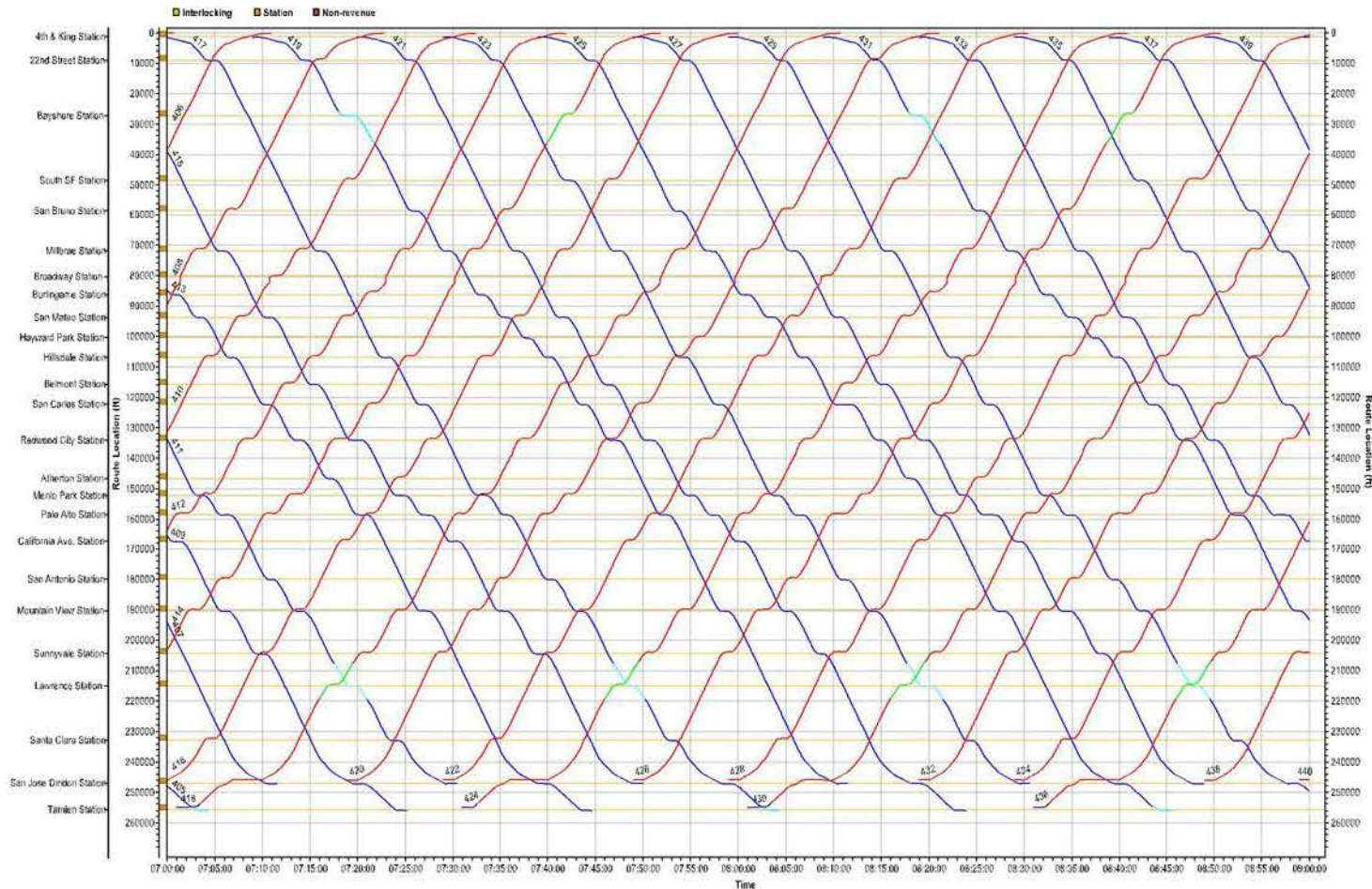


Figure 11. Time-Distance "String" Chart – 7 to 9 AM - 79/79 Baseline Infrastructure 0 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

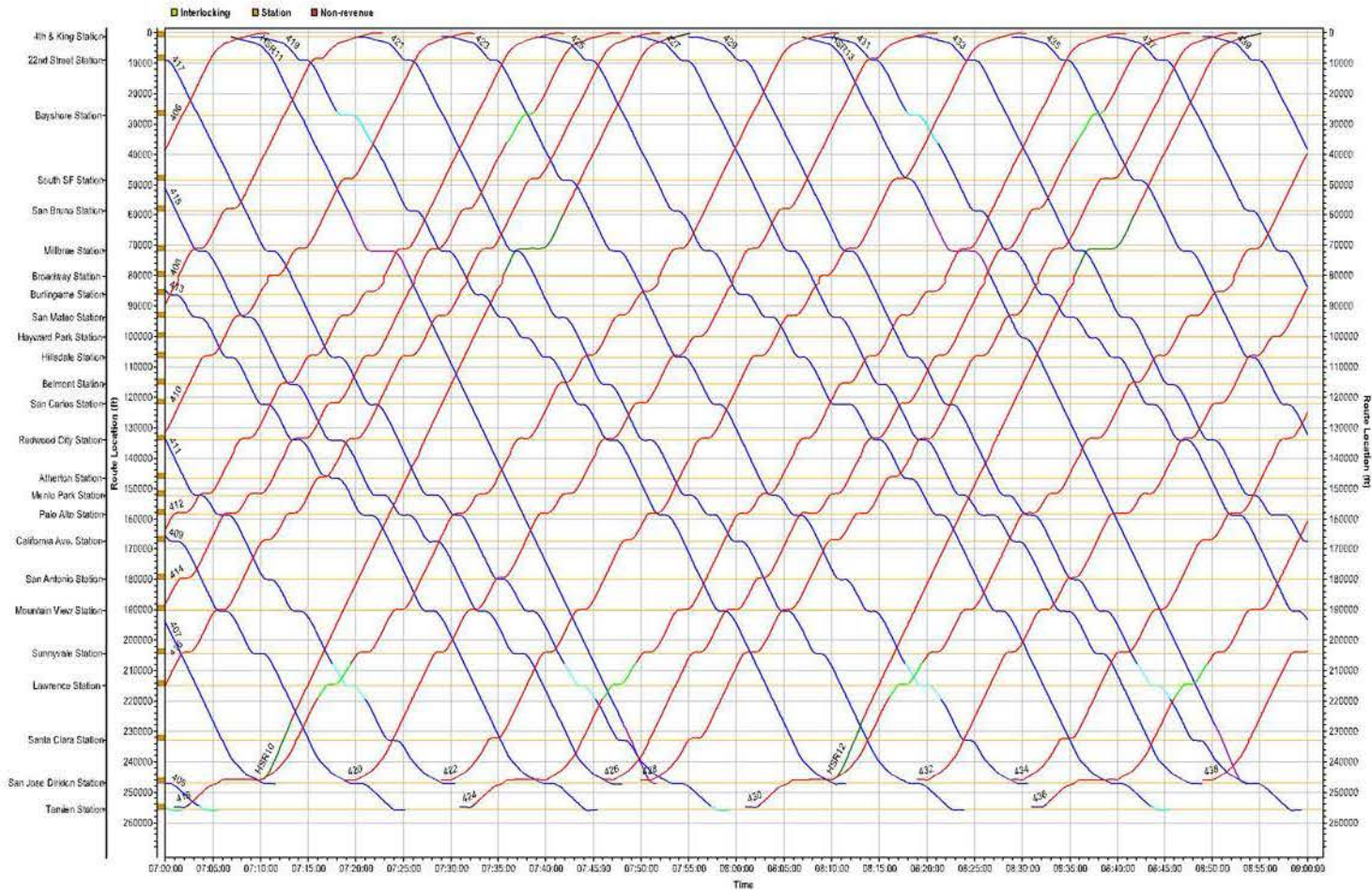


Figure 12. Time-Distance "String" Chart – 7 to 9 AM - 79/79 Baseline Infrastructure 1 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

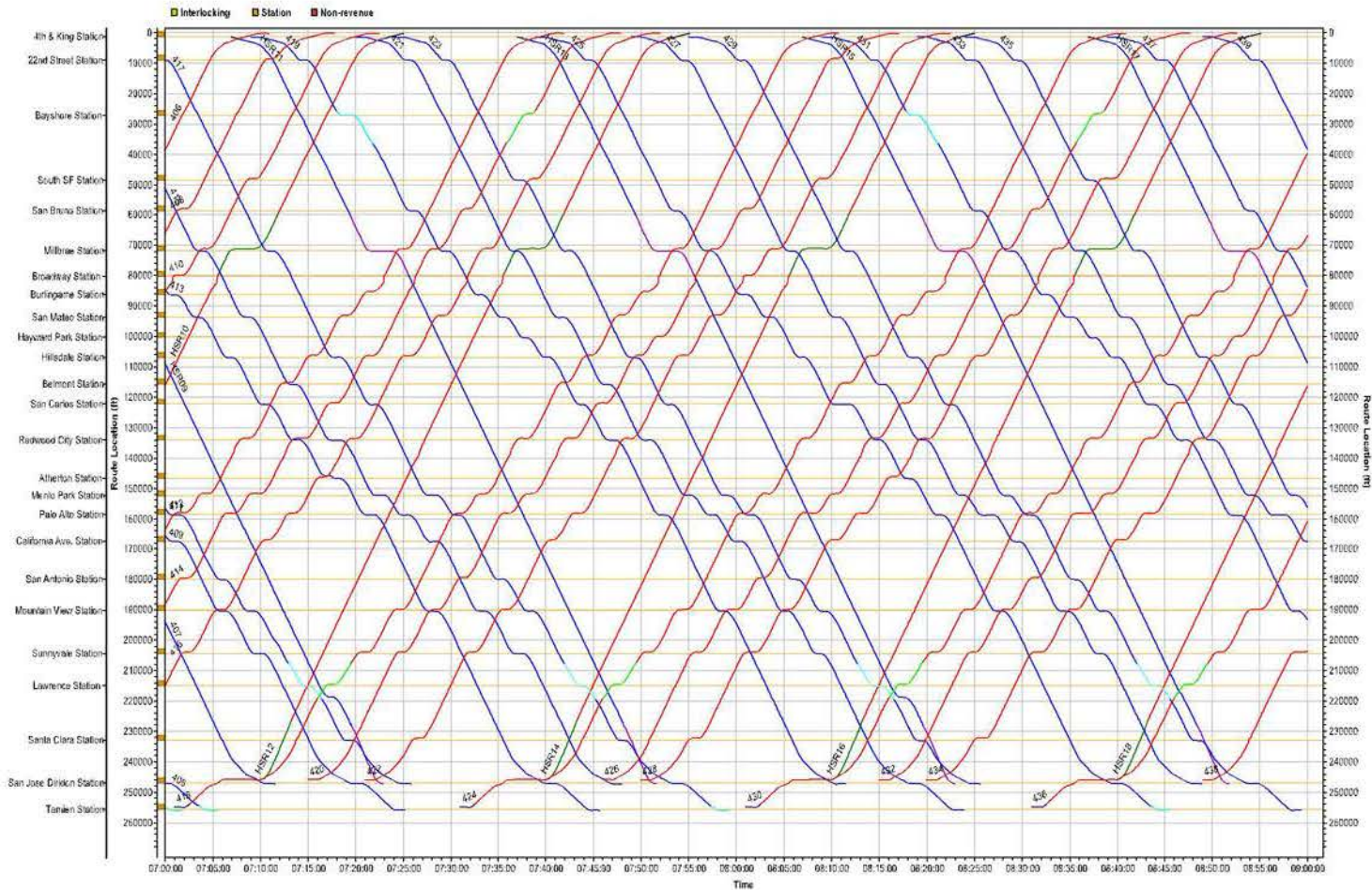


Figure 13. Time-Distance "String" Chart – 7 to 9 AM - 79/79 Baseline Infrastructure 2 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

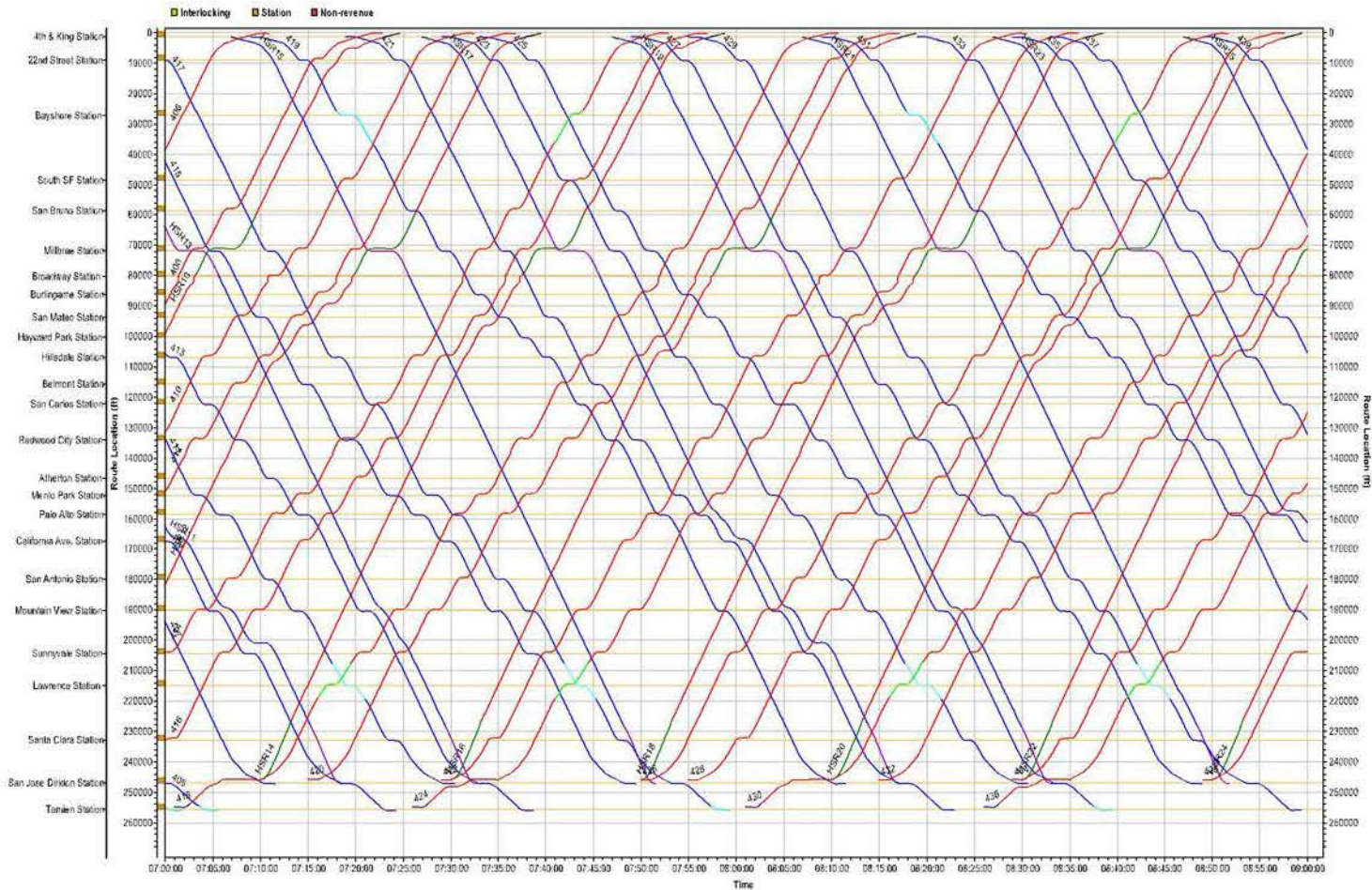


Figure 14. Time-Distance "String" Chart – 7 to 9 AM - 79/79 Baseline Infrastructure 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

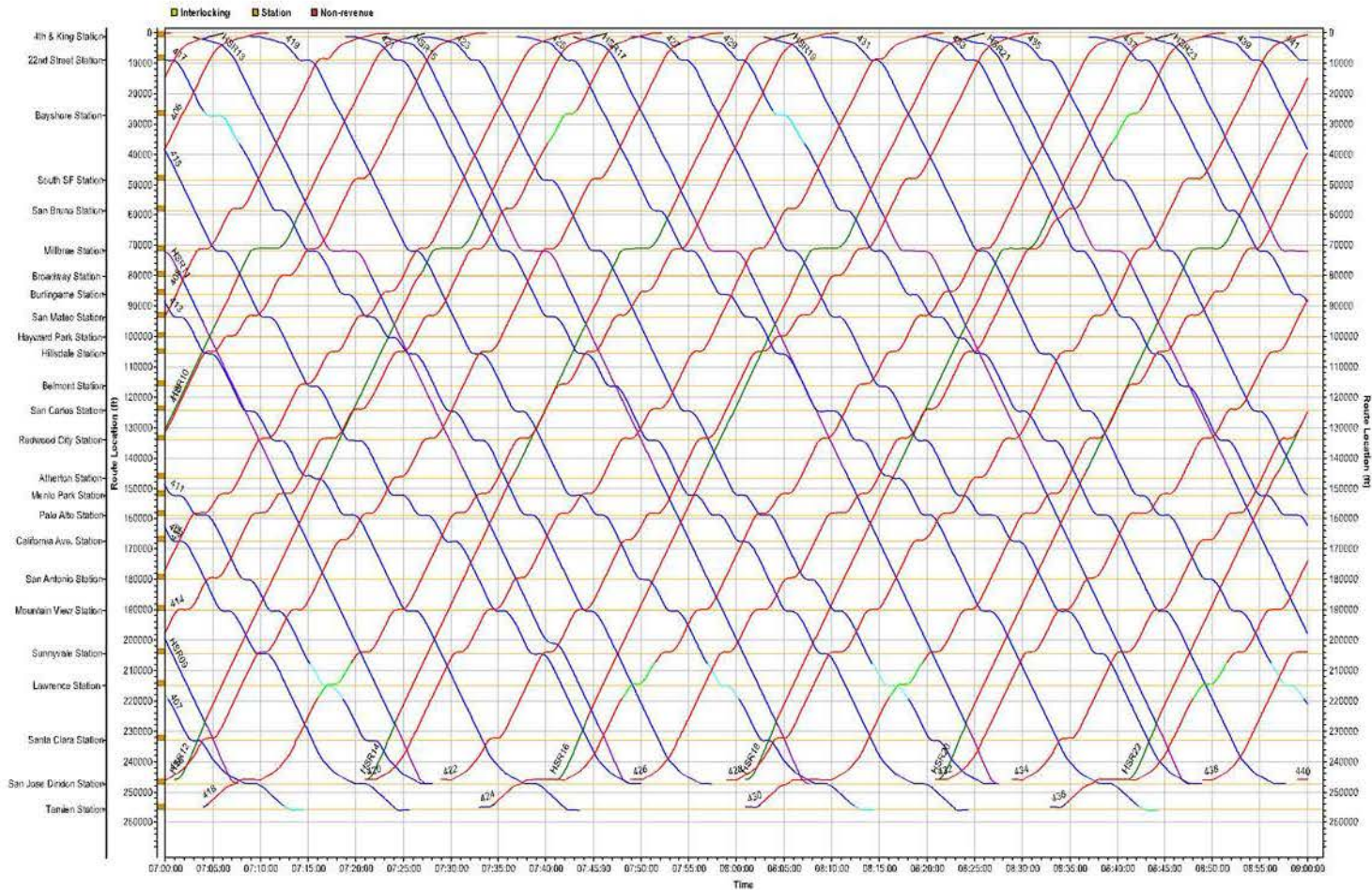


Figure 15 Time-Distance "String" Chart – 7 to 9 AM - 79/79 Full Midline Overtake 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

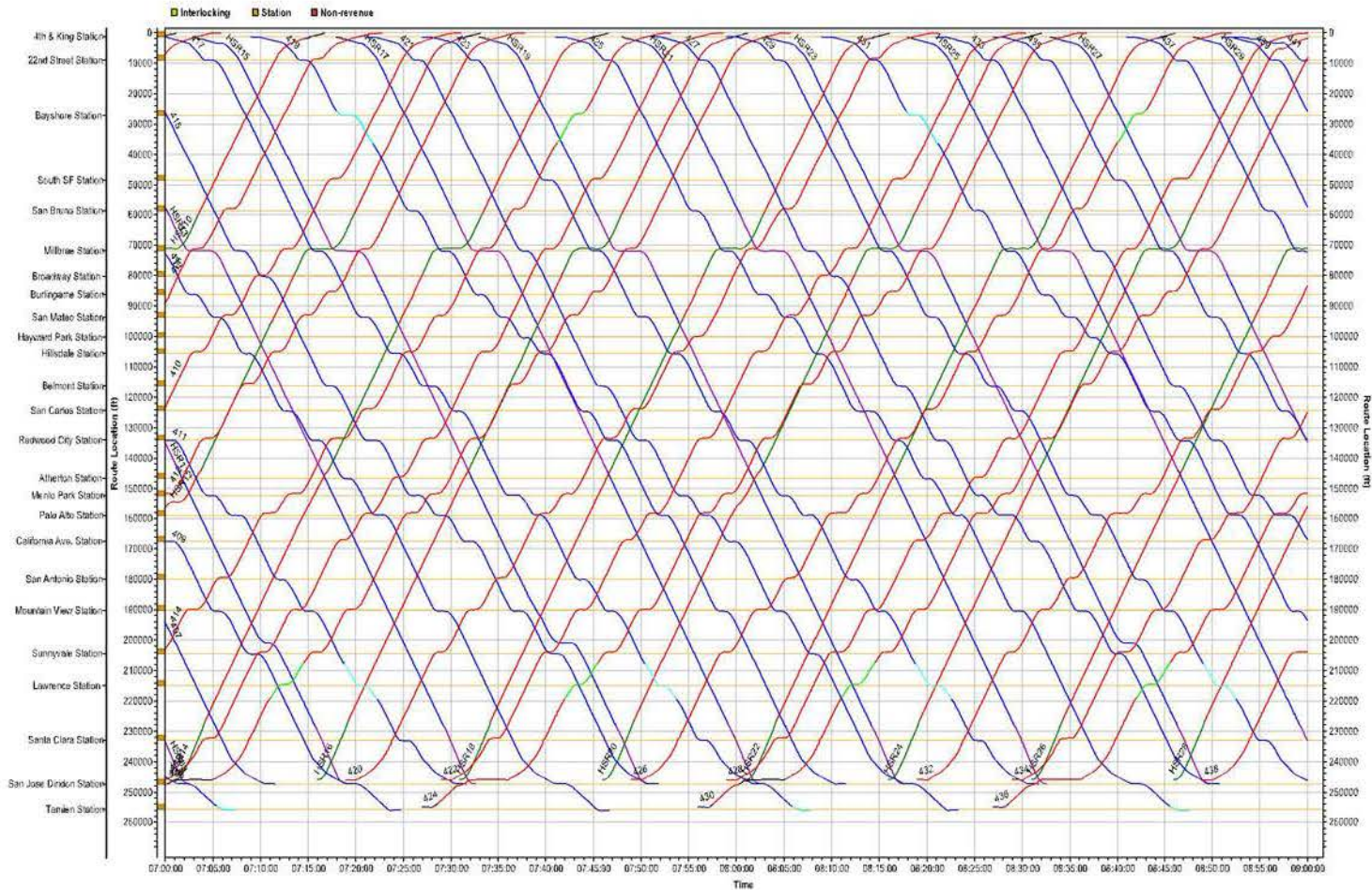


Figure 16. Time-Distance "String" Chart – 7 to 9 AM - 79/79 Full Midline Overtake 4 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

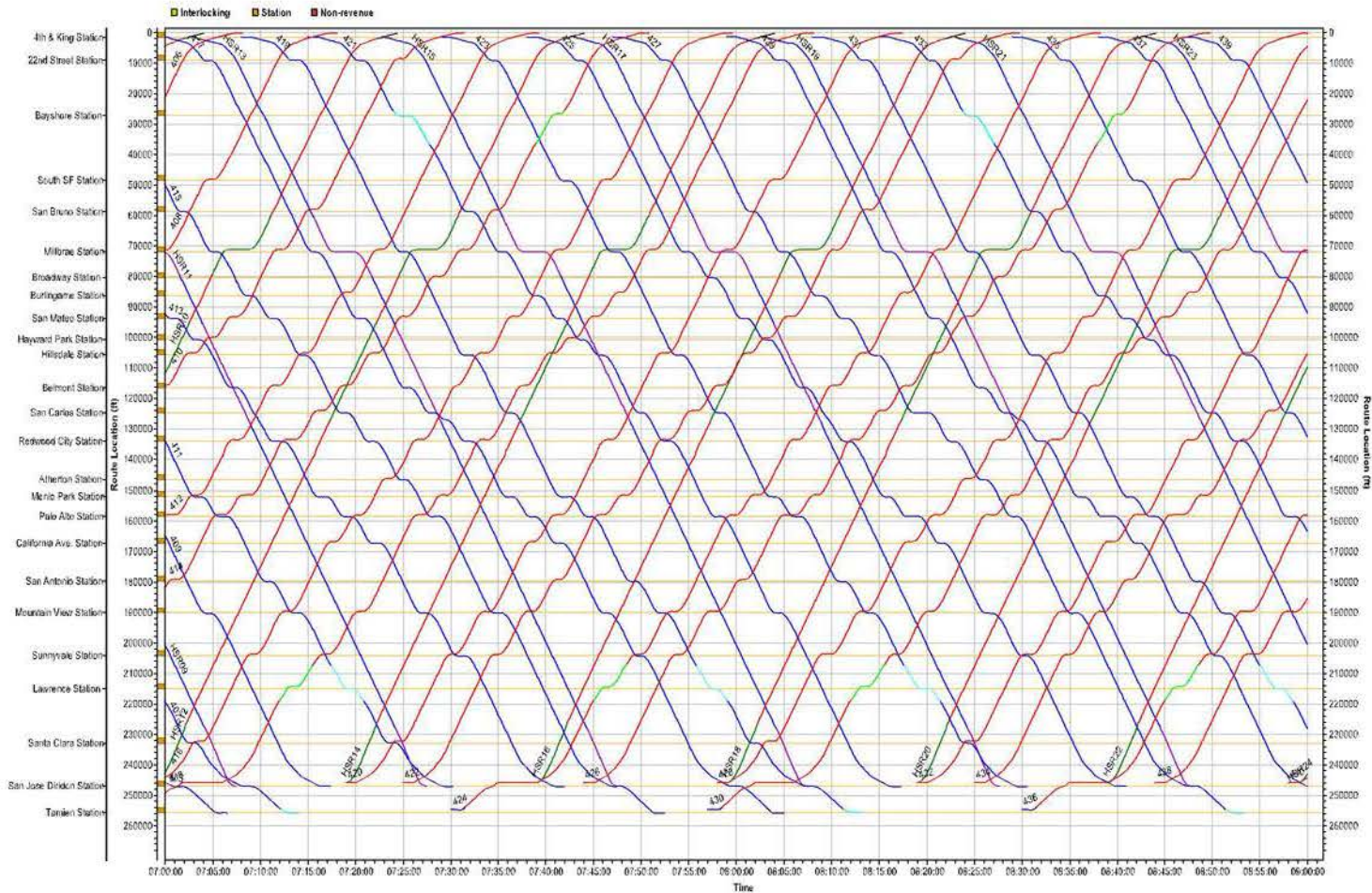


Figure 17. Time-Distance "String" Chart – 7 to 9 AM - 79/79 Short Midline Overtake 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

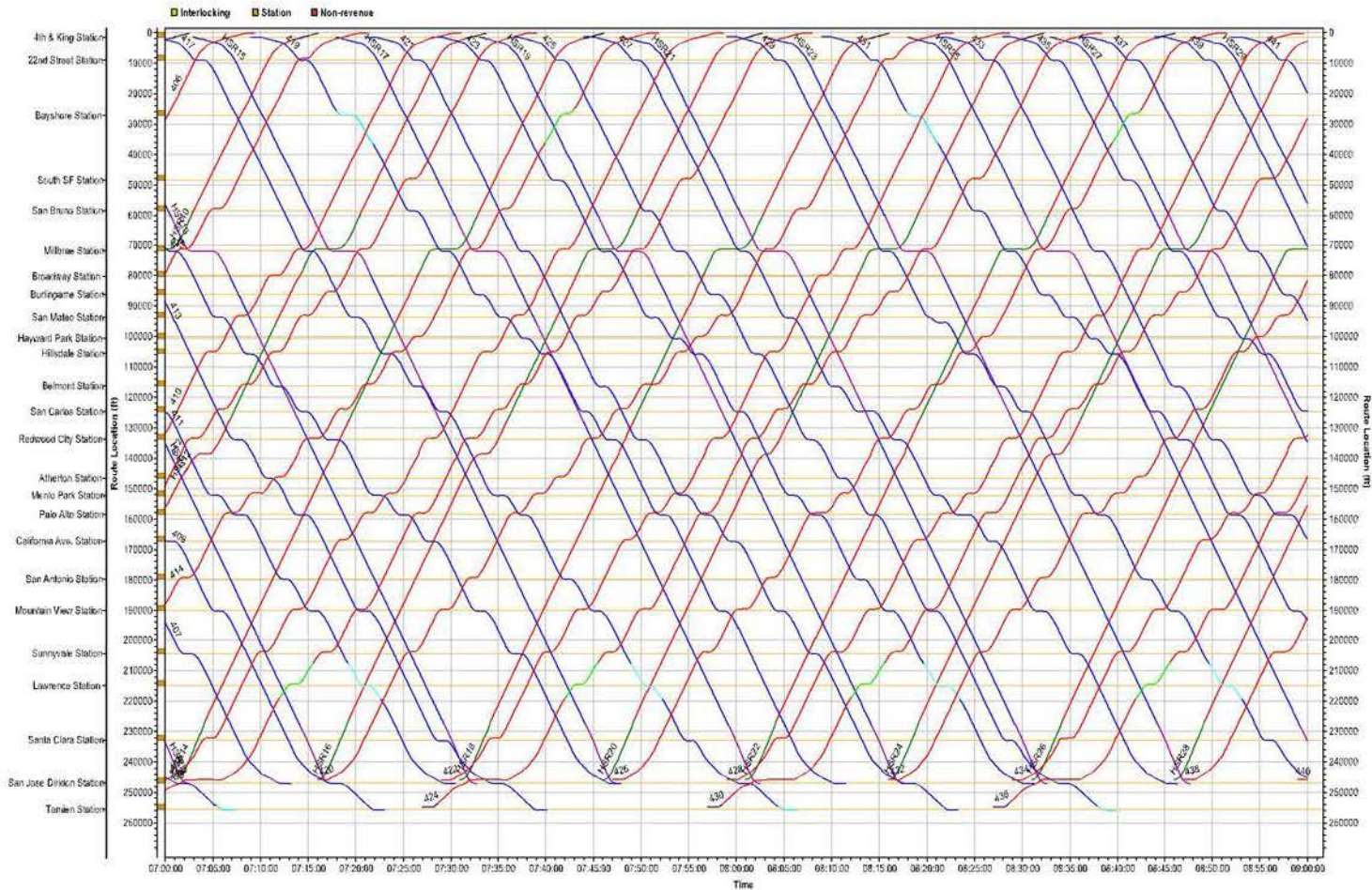


Figure 18. Time-Distance “String” Chart – 7 to 9 AM - 79/79 Short Midline Overtake 4 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

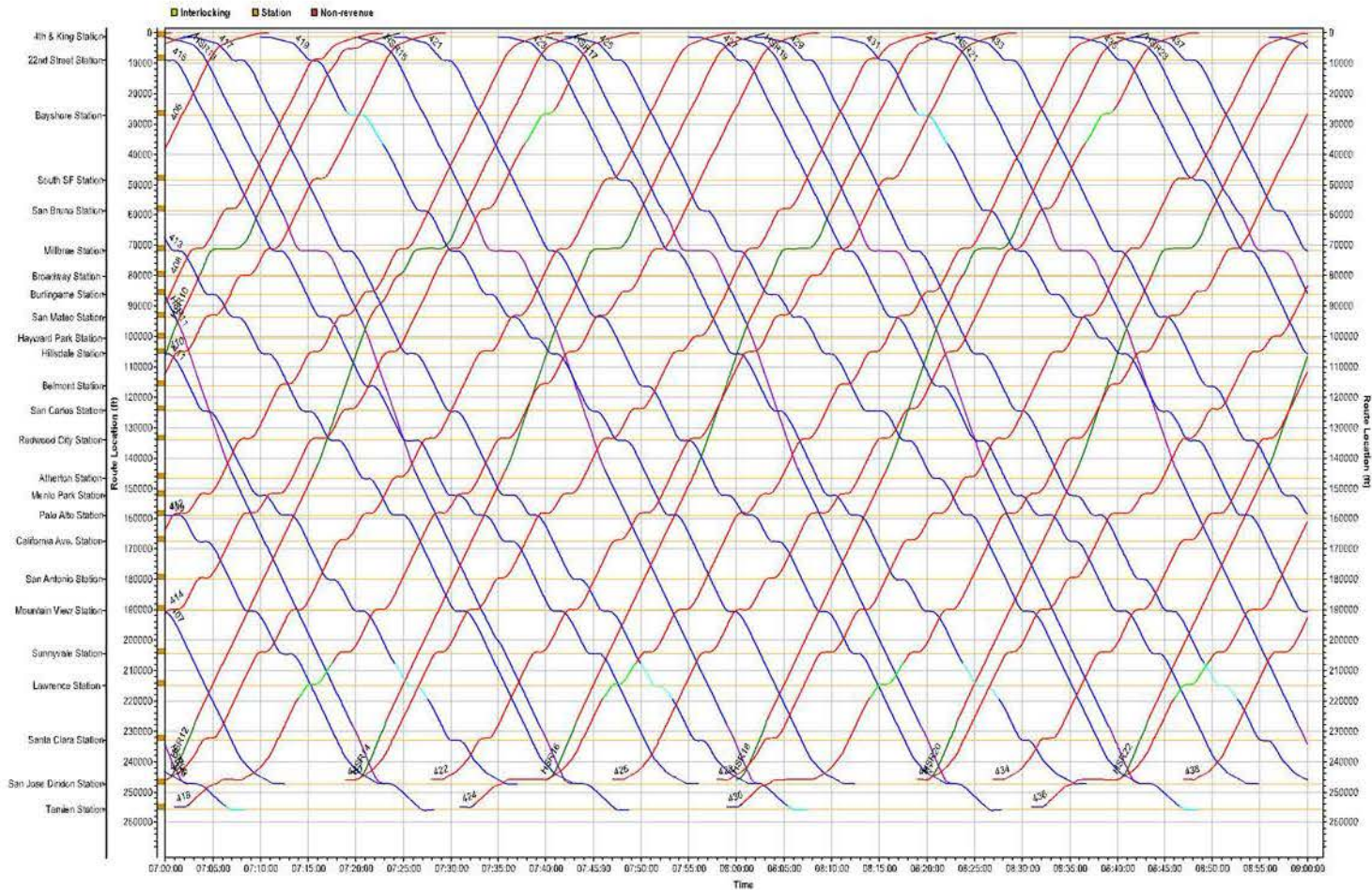


Figure 19. Time-Distance “String” Chart – 7 to 9 AM - 79/110 Full Midline Overtake 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

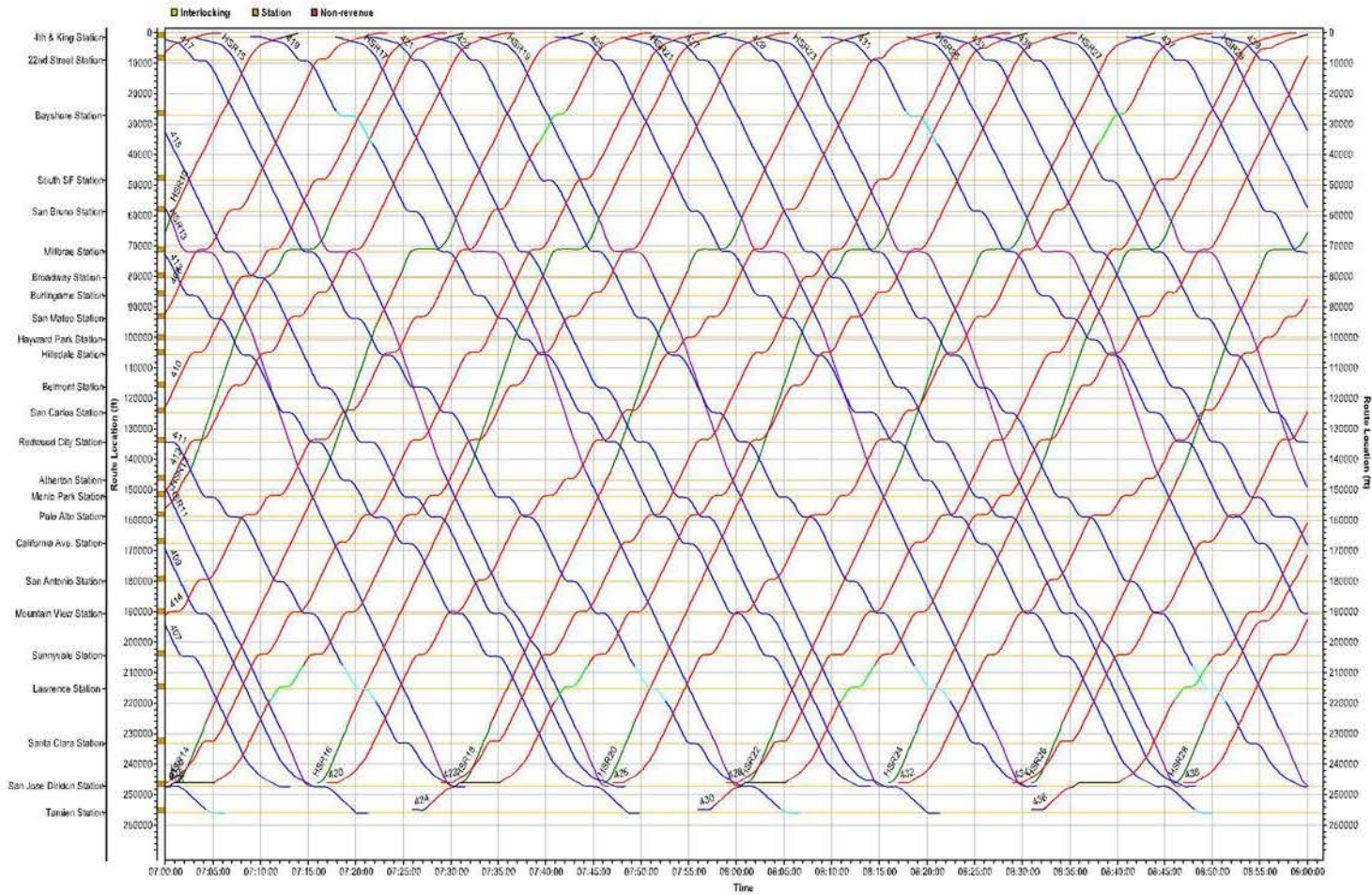


Figure 20. Time-Distance “String” Chart – 7 to 9 AM - 79/110 Full Midline Overtake 4 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

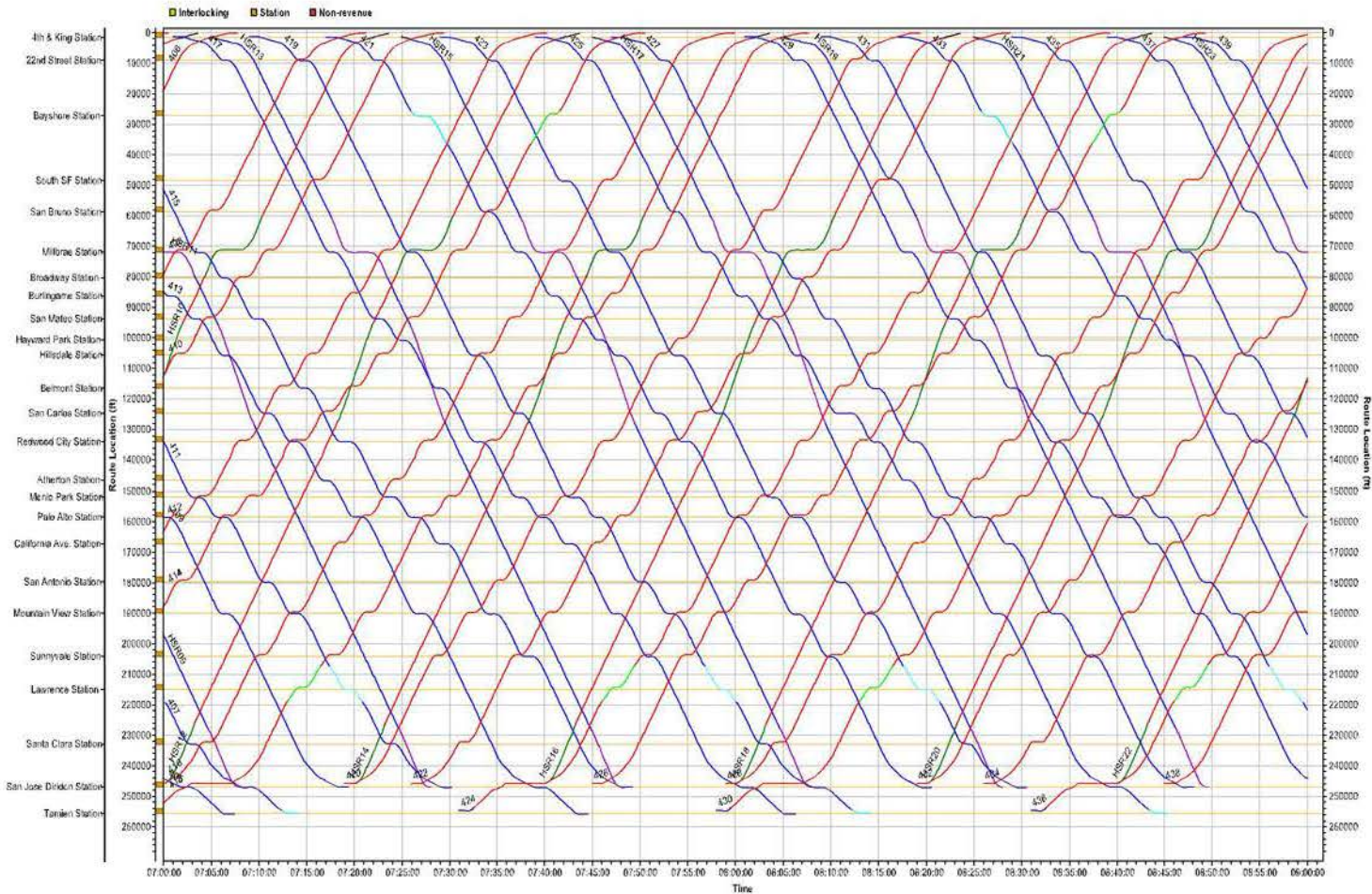
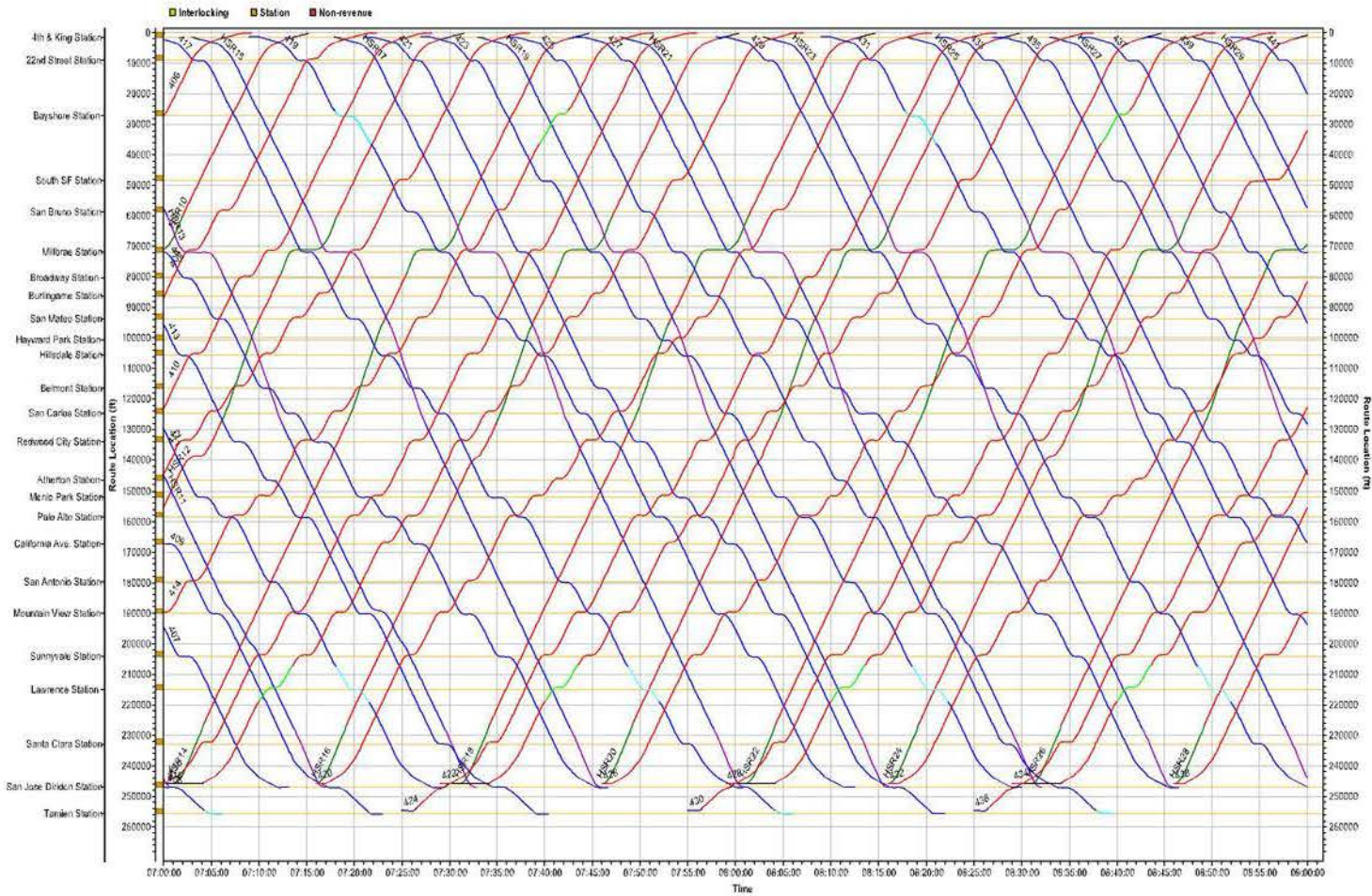


Figure 21. Time-Distance "String" Chart – 7 to 9 AM - 79/110 Short Midline Overtake 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued



Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

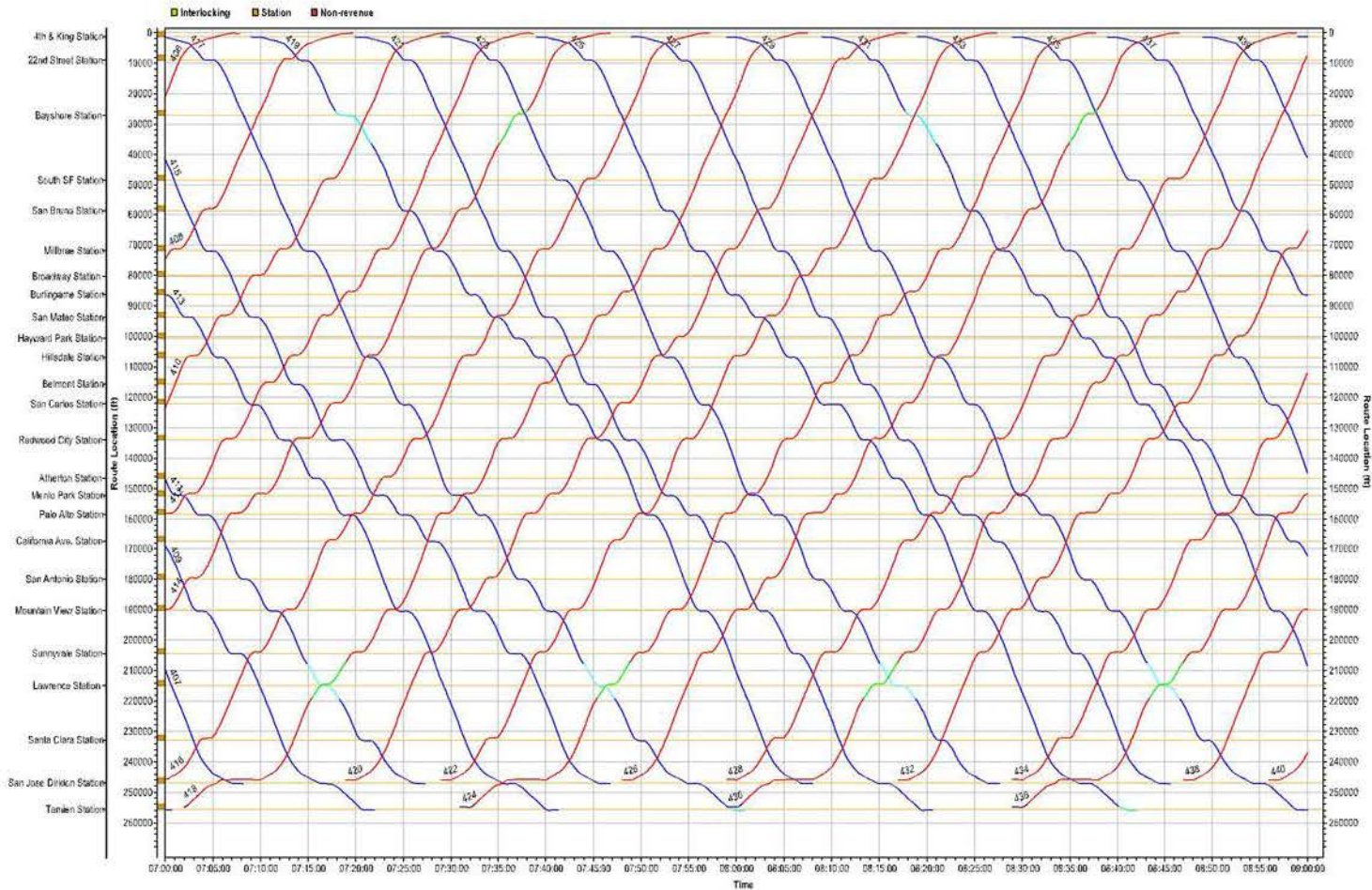
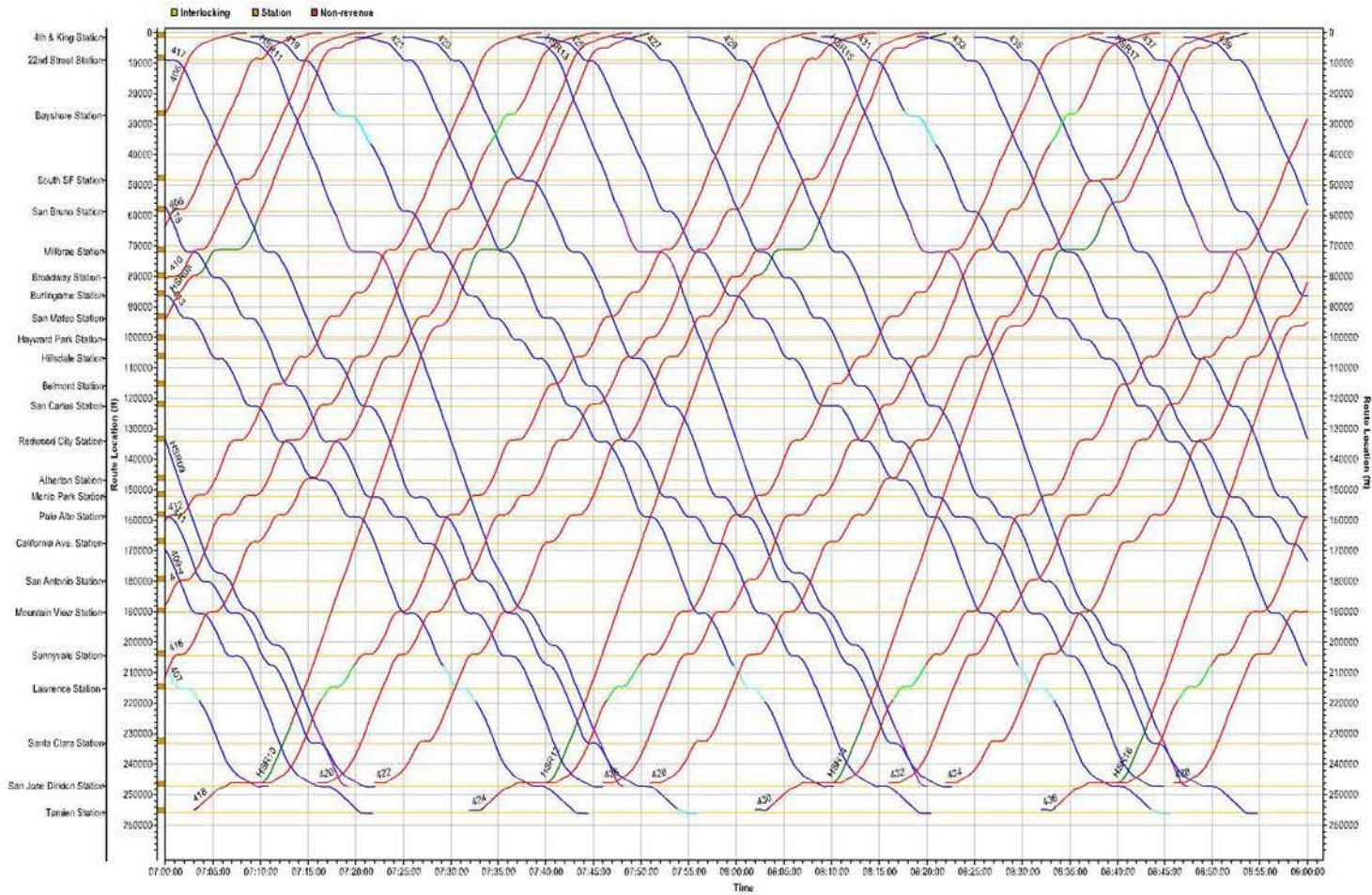


Figure 23. Time-Distance "String" Chart – 7 to 9 AM - 110/110 Baseline Infrastructure 0 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued



Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

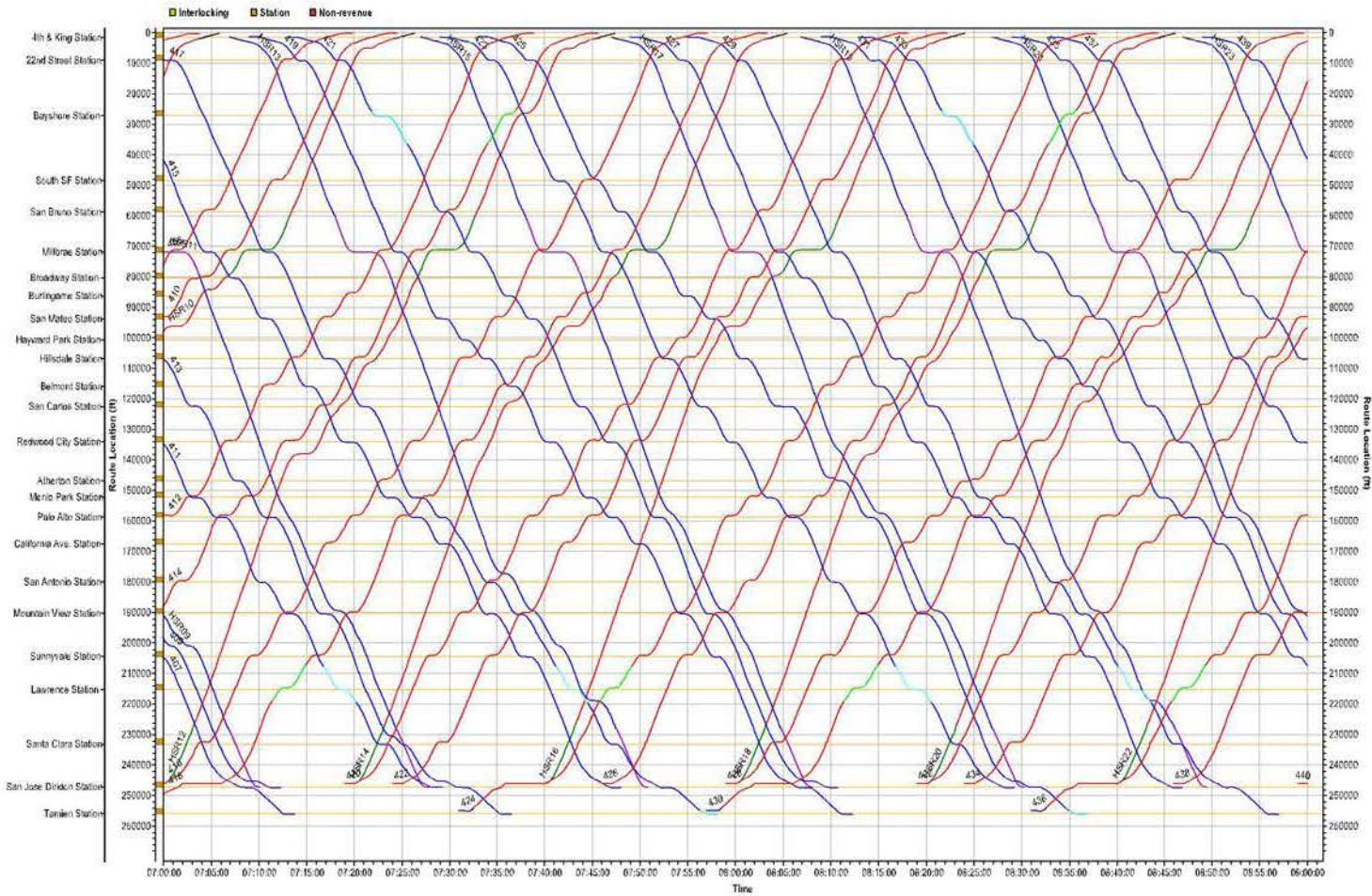


Figure 25. Time-Distance "String" Chart – 7 to 9 AM - 110/110 Baseline Infrastructure 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

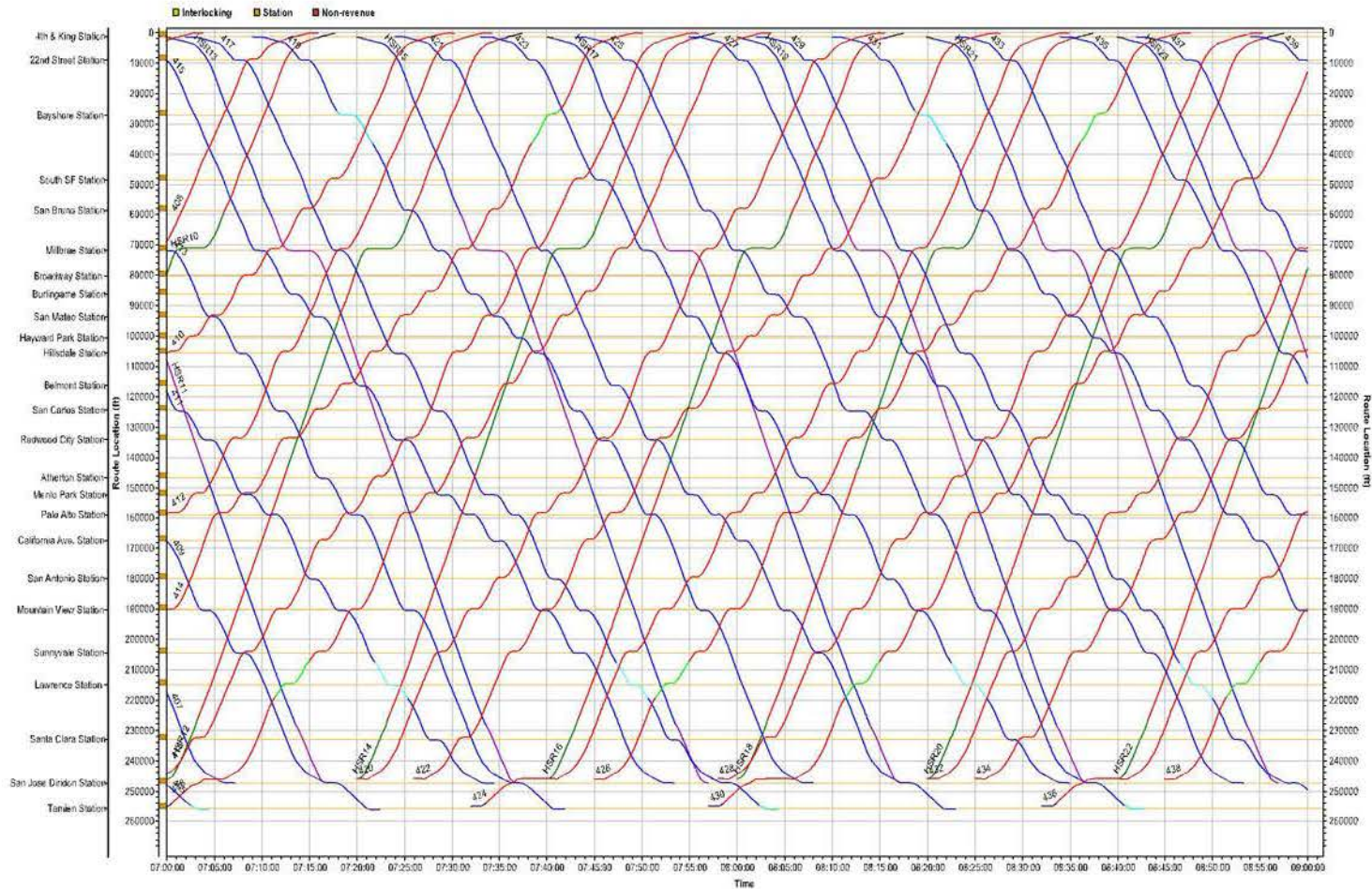


Figure 26. Time-Distance "String" Chart – 7 to 9 AM - 110/110 Full Midline Overtake 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

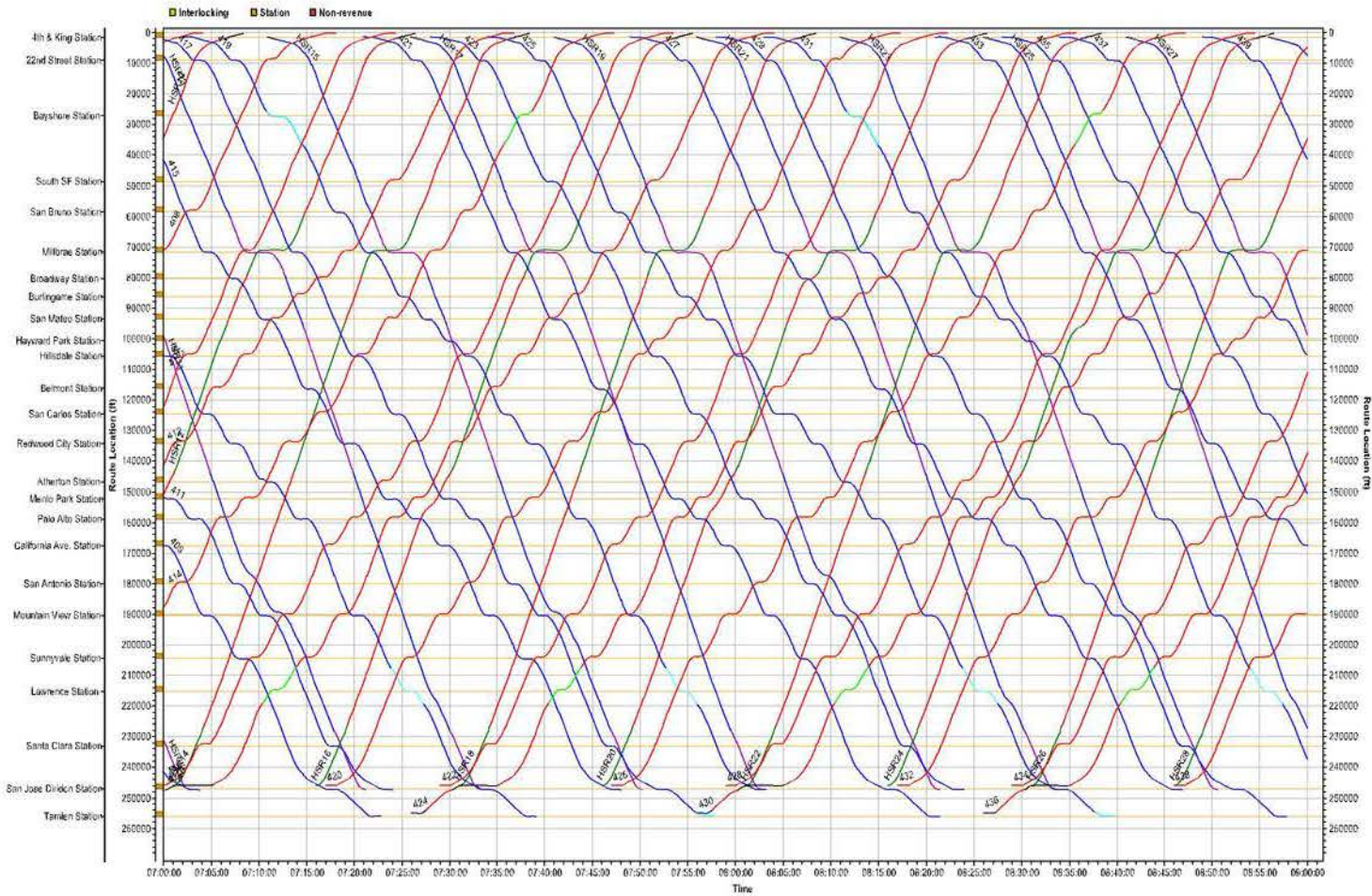


Figure 27. Time-Distance “String” Chart – 7 to 9 AM - 110/110 Full Midline Overtake 4 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

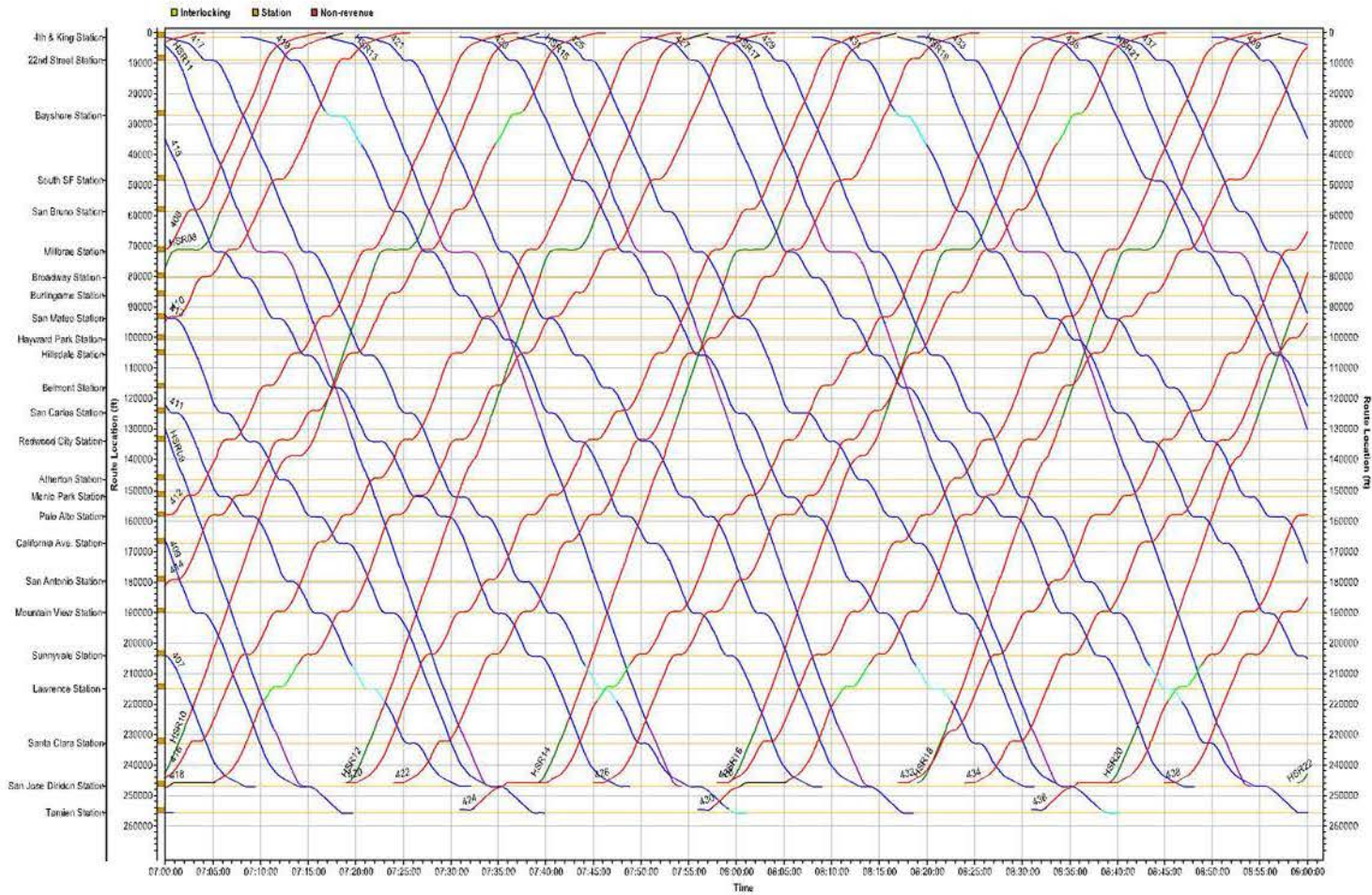


Figure 28. Time-Distance "String" Chart – 7 to 9 AM - 110/110 Short Midline Overtake 3 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

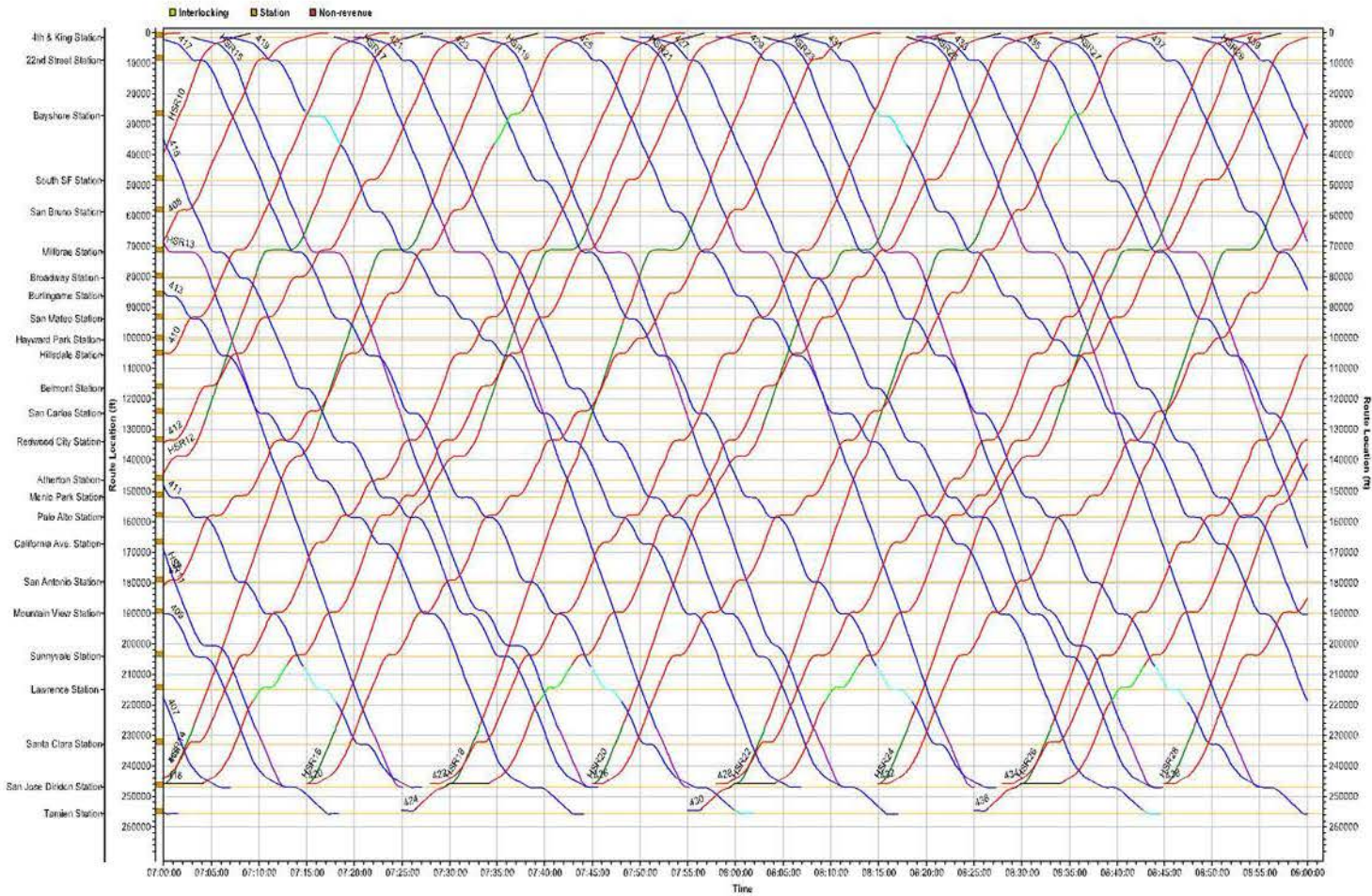


Figure 29. Time-Distance "String" Chart – 7 to 9 AM - 110/110 Short Midline Overtake 4 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

7.2 MIDDAY

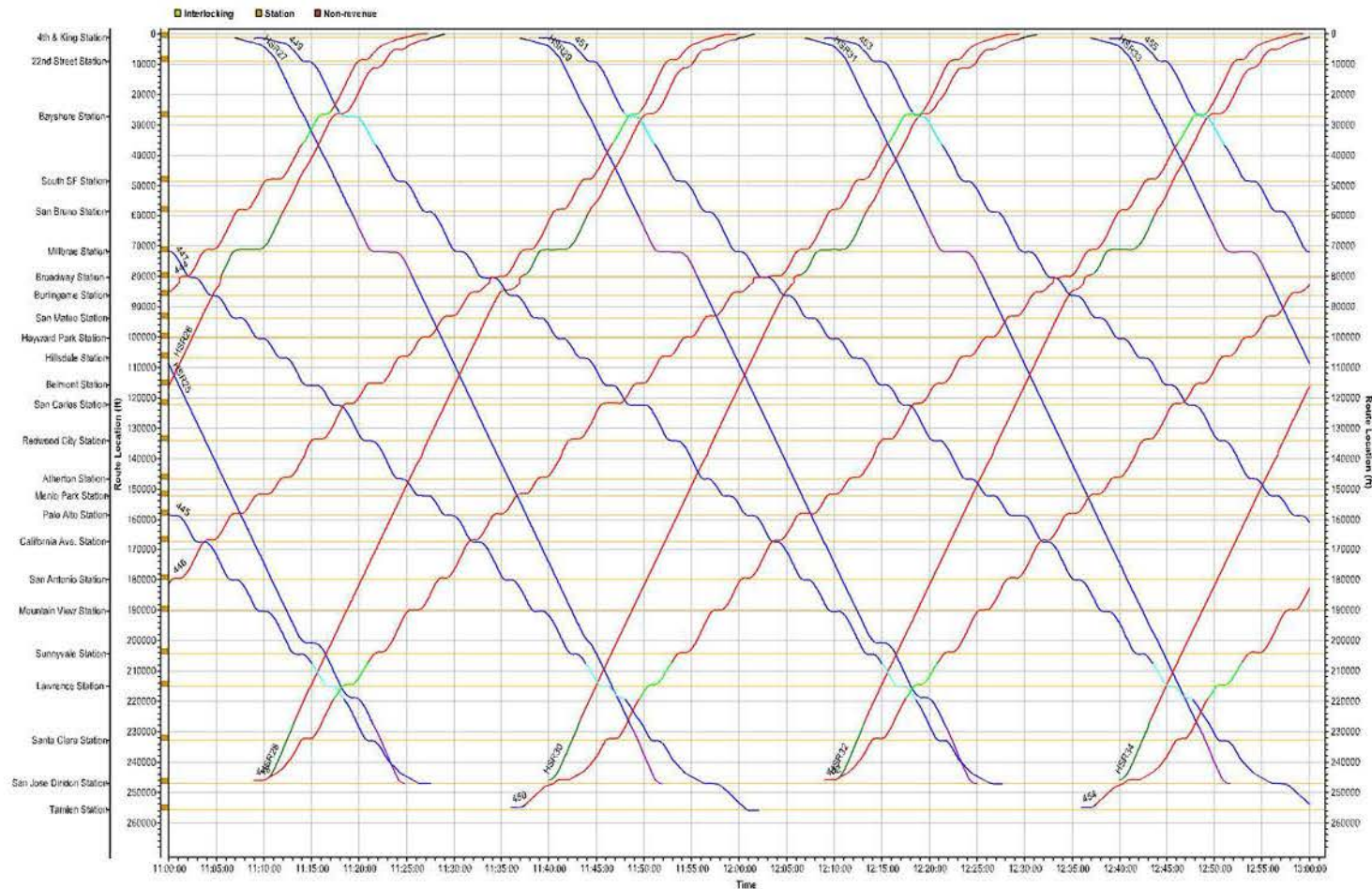


Figure 30. Time-Distance "String" Chart – 11 AM to 1 PM - 79/79 Baseline Infrastructure 2 HSR TPH

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

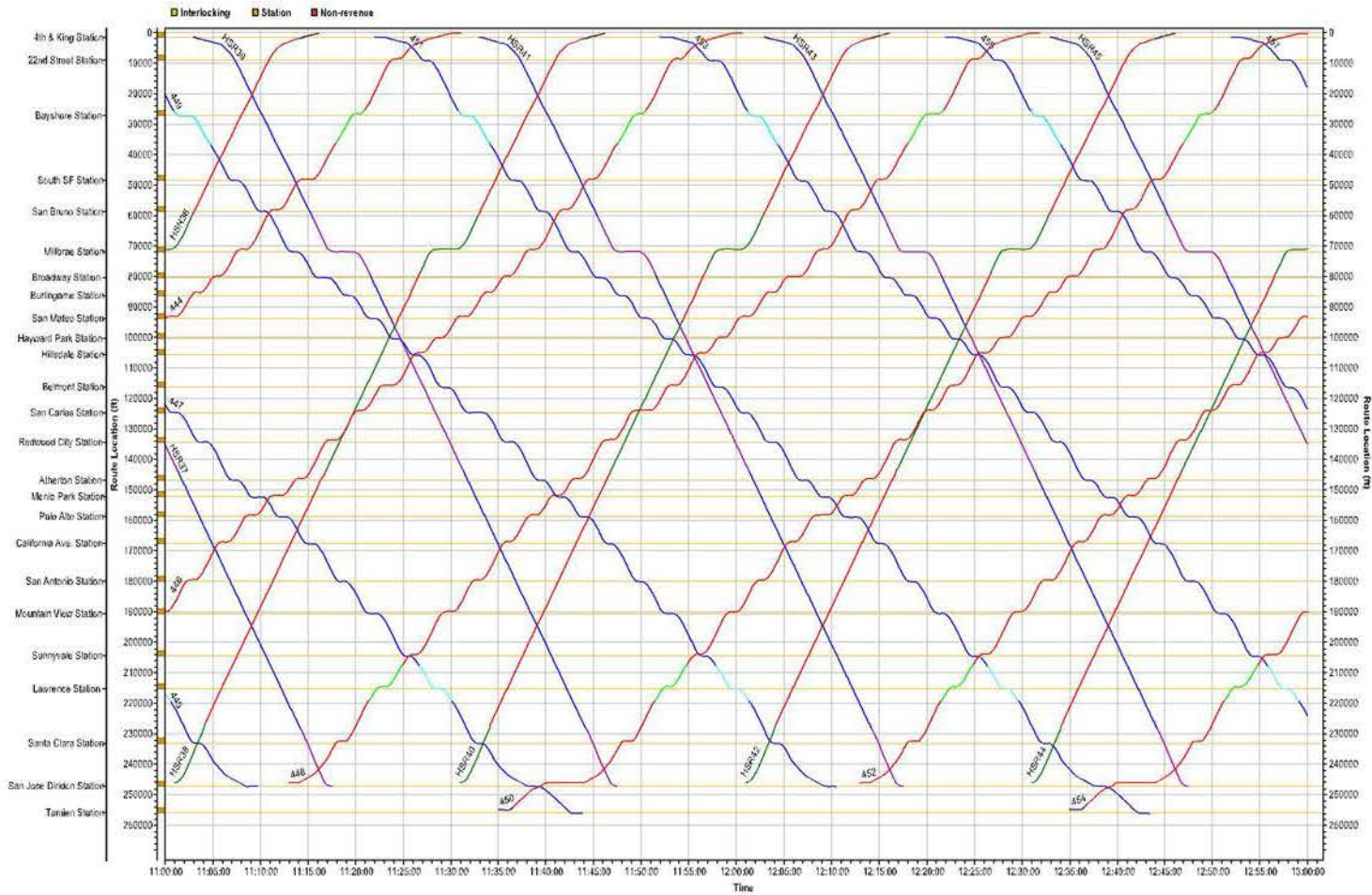


Figure 31. Time-Distance “String” Chart – 11 AM to 1 PM - 79/79 Midline Overtake 4 HSR TPH (2 HSR TPH Schedule in Off-Peak Periods)

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

8 Appendix C – Glossary

Advance Approach: *Aspect* giving a train on the Caltrain Corridor authority to proceed, subject to being able stop at the second wayside signal. Part of existing four *Aspect* Caltrain wayside system.

Approach: *Aspect* giving a train on the Caltrain Corridor authority to proceed, subject to being able to stop at the next wayside signal. Part of existing four *Aspect* Caltrain wayside system.

AREMA formula: Standard formula of the American Railway Engineering and Maintenance-of-Way Association (AREMA) for calculating the safe operating speed for a curve.

Aspect: The particular combination of lights, positions and flashing status of a wayside and/or cab signal that provides the train engineer with information on routing and occupancy status ahead.

At-grade crossing: Highway or street that requires automobile, bicycle and pedestrian traffic to cross the tracks at the same level.

Automatic signal: Wayside signal located between *Interlockings*.

Automatic territory: Track located outside of *interlockings*.

Automatic train control: System of wayside and on-board devices that monitors the engineer’s compliance with signal indications and, if the engineer fails to comply within a specified time period, automatically applies the brakes to reduce the train’s speed or stop it.

Bidirectional-ridership: Ridership that does not follow an AM/PM period specific pattern, as opposed to suburb-to-city unidirectional ridership.

Brake rate: Rate at which a train decelerates on level track.

Cab signaling: Signal indication or speed target displayed to the engineer within the vehicle.

Cant-deficiency: Lateral acceleration to the outside of a curve, expressed by the amount of superelevation that would be necessary to reach a balanced condition (no lateral acceleration). See also **Unbalance**.

CBOSS: Communications Based Overlay System. Caltrain implementation of PTC functionality with additional features for operational improvements.

Central control communication time: Time for the central control (dispatch center) instructions to reach an interlocking.

Clear: *Aspect* giving train authority to proceed at maximum speed. Part of existing four *Aspect* Caltrain wayside system.

Clockface schedule: A *timetable* schedule where trains arrive at an even interval that repeats hourly.

Conflicting route: A train immediately following another train through an *interlocking* on a different route that shares some track segments with the first train.

Consist: Collection of rolling stock cars that form a trainset.

Control line: Electrical connection between multiple signals that, when spanning from most favorable *Aspect* to most restrictive *Aspect*, defines the distance that a train can follow another train without needing to make a brake application.

Dwell time: Time from when a train stops a station until it begins moving again.

EMU: Electrical Multiple Unit. Electrified train type where all cars provide *tractive effort*.

Fleeted route: A train following another train through an *interlocking* on the same route without the dispatcher needing to reset the route for the following train.

Full seated load: Maximum seated capacity for a train.

Golden run: Ideal simulation run with best possible vehicle performance, no underspeed and without randomization.

Headway: Time (either scheduled or actual) between successive trains on the corridor.

Holdout rule: Operating rule on the Caltrain Corridor that requires trains to wait for other trains to pass or finish unloading passengers at stations where pedestrians must cross the track.

Interlocking territory: Track located within track junctions where powered switches are present.

Interlocking: Control point protected by signals where movable bridges, rail crossings or turnouts exist.

Layover: Time spent between runs at a terminal or yard.

Loss-of-shunt time: Time for the electrical circuit within an *interlocking* to be grounded and then reset.

Maintenance tolerance: Additional conservatism added to safe operating speed to limit occurrences of temporary speed restrictions due to rail wear and loss of *super-elevation* over time.

Attachment to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 21, 2012) - Continued

Maximum operating speed: Maximum permissible speed on a given segment of track.

Minimum train separation: Closest distance at which one train can follow another without being delayed.

Passenger alighting time: Total time for passengers to exit the train. It is a component of *dwelling time*.

Passenger boarding time: Total time for passengers to enter the train. It is a component of *dwelling time*.

Peak period: Heaviest ridership periods which, for the Caltrain Corridor, are defined as 6-10 AM in the morning and 3-7 PM in the evening.

PTC: Positive Train Control, an impending FRA requirement for railroads carrying passengers and/or certain types of hazardous materials to enforce safe train separation, civil speed restrictions, temporary speed restrictions and roadway worker safety zones.

Recovery allowance: Time added to a schedule to plan for unexpected delays. See also *schedule margin*.

Right-of-way: Property encompassing a rail corridor controlled by the railroad.

Rolling stock: Individual car, locomotive or self-propelled multiple unit vehicle of a trainset.

Route reestablishment time: Time required for a train to be granted permission via signal indication to enter an *interlocking*.

ROW: See right-of-way

Schedule margin: Additional time added to a train schedule to account for unpredictable delays and less than ideal train and engineer performance.

Signal block: Section of track between two signals.

Signal delay: Time that a train is braking or stopped for a signal because it is displaying an *Aspect* more restrictive than the best *Aspect* that can be displayed at that location for a given train route.

Skip-stop: Scheduling technique of alternating station stops to increase average travel speeds and to reduce trip times.

Super-elevation: Difference in elevation between inside and outside rails in a curve.

Switch movement time: Time it takes for a switch to mechanically change positions and for switch detectors to verify that the switch has moved to the requested new position.

Timetable: Schedule provided to passengers and/or operating personnel.

Track alignment: Horizontal curve values and vertical grade values along the corridor.

Tractive effort: Force that a train's motors generate for forward movement.

Unbalance: Lateral acceleration to the outside of a curve, expressed by the amount of superelevation that would be necessary to reach a balanced condition (no lateral acceleration). See also: *cant-deficiency*.

Wayside signaling: Signals alongside the track that convey to the train engineer occupancy and/or routing status ahead.

Response to Submission 56 (David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF), February 22, 2012)

56-104

The Partially Revised Draft Program EIR did identify additional significant and unavoidable impacts. These impact determinations were made in response to additional analysis required by the *Atherton 1* and *Atherton 2* litigation. Chapter 6 of this 2012 Partially Revised Draft Program EIR describes that the revisions to the analysis required by the rulings of *Atherton 1* and *Atherton 2* did not alter prior recommendations of the Pacheco Pass Network Alternative serving San Francisco via San Jose as the preferred alternative. In compliance with CEQA, this analysis was published and circulated for public review as part of this 2012 Partially Revised Draft Program EIR.

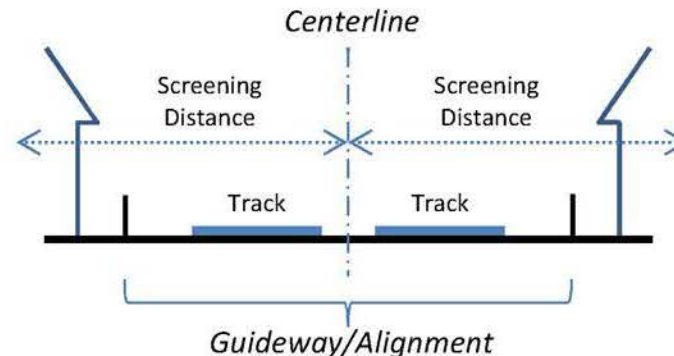
The Authority does not agree with the commenters’ assertion that the Program EIR must study an Altamont Corridor Rail Project plus a San Francisco to San Jose blended alignment as a new alternative in the Program EIR. To meet the travel-time requirements of Proposition 1A, an Altamont Corridor alignment would require crossing the San Francisco Bay. The 2008 Final Program EIR considered an alignment across the Bay in the Dumbarton Corridor. Depending on the particular alignment chosen and the crossing structure (a low bridge, high bridge, or tube), the crossing was estimated to range in cost between \$1.53 billion and \$3.09 billion (p. 7-125), and would result in large direct impacts on wetlands and bay waters. Refer to the Response to Comment 56-111 for further discussion.

56-105

The screening methodologies in the current FRA (October 2005) and FTA (May 2006) Guidance Manuals (Manual) are very similar and provide specific guidance for program-level analysis. The intent of the screening methodology is to conservatively quantify the number of potentially impacted sensitive receptors (“upper bound on the potential for impact”) along a corridor. The screening distance provided in both manuals takes into account several factors such as

train speed, noise emission characteristics of current train technology, and the nature of the corridor (characterized by typical existing ambient noise levels for different land use patterns).

The 1998 FRA Guidance Manual did not address HST speeds less than 125 mph, whereas the 1995 FTA Guidance Manual did. The Statewide Programmatic EIR/EIS was published prior to the issuance of the 2005 FRA Manual and the 2006 FTA Guidance Manual and used 375 feet as the screening distance for train speeds up to 125 mph, such as between San Francisco and San Jose and in some areas along Monterey Highway. This screening distance accounts for use of diesel locomotives, which tend to be noisier than current high speed trains. For consistency, subsequent noise analyses for the 2008 Final Program EIR used the same screening distance (375 feet) from the centerline of the guideway (i.e., alignment) that was used in the 2005 Statewide Programmatic analysis (the 2008 data was subsequently used in the 2012 Partially Revised Draft Program EIR). Table 4-1 in the 2006 FTA Guidance Manual states the screening distance is “measured from centerline of guideway/roadway for mobile sources.” The 2006 FTA Manual also defines guideway as “supporting structure to form a track for rolling or magnetically-levitated vehicles.” This is best illustrated below.



Text in Chapter 2, Pages 2-2 and 2-4, of the Partially Revised Final Program EIR has been revised to better explain the screening distance and how it has been applied, consistent with the FTA guidance.

In addition, the 2005 FRA Manual indicates three HST speed regimes (Regime I, Regime II, and Regime III) used to characterize in general the noise emission from HST. Speed Regime I is characterized by noise dominated by propulsion and machinery and applies up to a transition speed of 60 mph. Speed Regime II (transition speed of up to 170 mph) noise is due primarily to wheel/rail interactions. In Regime III (greater than 170 mph) aerodynamic noise is dominant. Figure 2-7 in the 2005 FRA Manual indicates that high speed train noise is higher at higher speeds (i.e., the greater the speed the greater the noise).

The 2005 FRA Manual provides two sets of screening distances for HSTs: one for Regime II and one for Regime III (none for Regime I). The manual indicates that the screening distance for Regime II with steel-wheeled trains in an urban/noisy suburban area next to a railroad corridor where there are intervening buildings is 200 feet as "measured from the centerline of guideway or rail corridor." The noise screening analyses performed for the 2008 used 375 feet, which is 175 feet greater than what is recommended in the current FRA Guidance Manual and conservatively captures potentially affected receptors.

The Partially Revised Draft Program EIR, Noise and Vibration Technical Memoranda, are the basis of the information contained in the Partially Revised Draft Program EIR and were listed in Chapter 9, Sources Used in Document Preparation, and were available upon request.

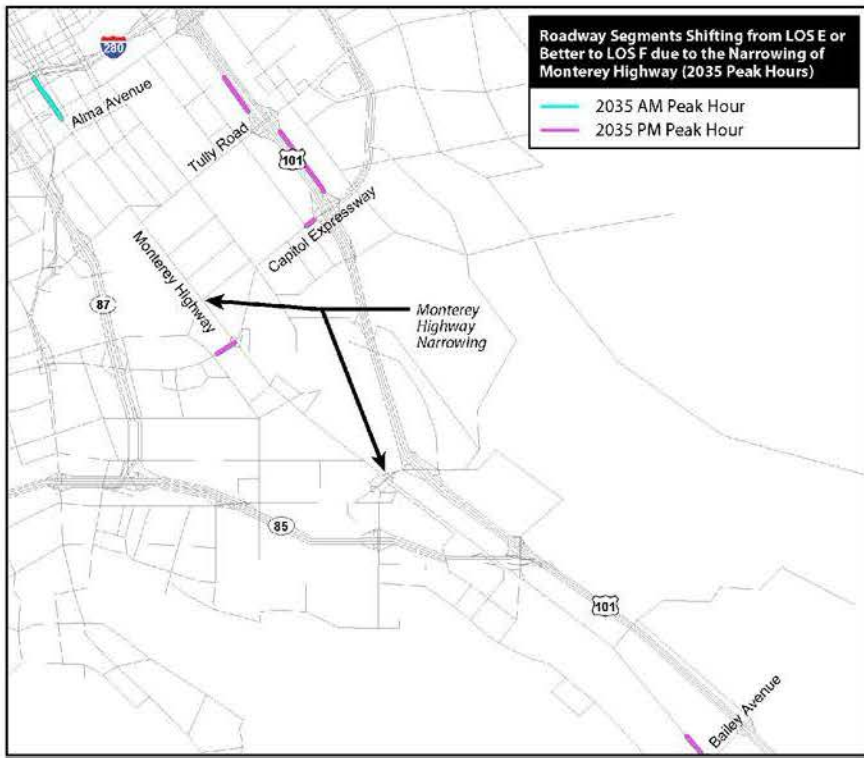
56-106

The text of Chapter 2 of the Partially Revised Final Program EIR accompanying Figure 2-2 depicting the locations of Monterey Highway narrowing and right-of-way shifting explains that where the lanes and right-of-way will shift, it will shift to the east. Please refer to page 2-6 of the Partially Revised Final Program EIR.

The analysis contained within the Partially Revised Final Program EIR uses a conservative approach to analyze the impacts on traffic from the Monterey Highway narrowing. The Partially Revised Final Program EIR analyzes whether the narrowing will cause segments of Monterey Highway itself to operate at LOS E or worse. The Partially Revised Final Program EIR also analyzes surrounding streets that operate at LOS E or worse, and evaluates whether those surrounding streets are anticipated to experience a significant increase in traffic congestion. Focusing on LOS E represents a conservative approach to identification of potentially significant impacts.

A full picture of the actual volume shifts in the traffic network is contained within the figures provided in the appendix to the Traffic and Circulation Technical Memorandum: Monterey Highway.

In response to the comment's focus on LOS F, the following analysis is provided. Under the 2010 peak hours, the narrowing of Monterey Highway would not cause any of the roadway segments to deteriorate from LOS E or better to LOS F. During the 2035 AM peak hour the narrowing would cause one segment of SR 82 near I-280 to deteriorate to LOS F. During the 2035 PM peak hour, the narrowing will lead to the deterioration of one roadway segment each on Monterey Highway, US 101 and I-280 to deteriorate to LOS F. These roadway segments are shown in the figure below. However, it should be noted that this analysis does not include the traffic diverted from the local street system to the HST, which could negate the impact of additional traffic. This level of analysis will be conducted at the second-tier project-level and will be documented in the project-level environmental document and traffic report. The location of the UPRR tracks will be noted in the figures presented for the project-level analysis.



56-107

The effect of the closure of parallel roadways has been addressed on an individual roadway basis. Refer to Response to Comment 59-132 for more information.

The remaining capacity through an intersection is indicated by the volume to capacity ratio, which is shown on the TRAFFIX calculation sheets that were included as an appendix to the traffic technical memorandum listed in Chapter 9, References. The theoretical maximum capacity is represented by 1.0. If the TRAFFIX calculation sheets indicate a volume to capacity ratio of 0.90, the remaining unused capacity through the intersection would be 10 percent. While this information is available, this level of technical detail was not needed in the Partially Revised Draft Program EIR, which focused on more easily understood level of service (LOS) calculations.

The study area established for the analysis encompassed potential changes in circulation patterns that could affect not only the roads where closures would occur, but also the nearest parallel arterial. The analysis conservatively applied diverted traffic onto the nearest parallel arterial and evaluated potentially affected intersections to determine the impacts of those changes under both existing and 2035 forecast scenarios. In Chapter 3, intersection LOS with the HST project is provided for these potentially effected intersections and compared to the existing and 2035 without project scenarios. The significance thresholds established by the local county congestion management agencies were used to determine the level of impact at a CMA-designated intersection, as the comment suggests. The LOS effects of potential lane closures were treated as a potential impact and mitigation strategies were provided in Chapter 3. This analysis covered an area that was sufficiently large enough to determine potential impacts and consider them in the programmatic context. Future project-level analysis will be conducted for project-level alignment alternatives once a preferred programmatic alignment is approved. This project-level analysis will consider potential traffic and transportation impacts at a greater level of detail and provide specific mitigation measures to mitigate identified impacts.

The Authority disagrees that the traffic analysis produces results that were bizarre. The traffic operations results are logical. The following information is provided for the benefit of the reader to address results that may initially seem counterintuitive:

- The shift in traffic from streets that is currently two-way to one-way results in a decrease of traffic on one street and an increase in traffic on certain parallel streets.
- The street with the added traffic usually experiences an increase in vehicle delay at the signalized intersections and degradation in intersection level of service.
- For the street that is converted to one-way, not only are traffic volumes removed for one direction of travel, the signal phases that control that direction of travel is no longer necessary.
- Reducing traffic volumes and signal phases through an intersection will almost certainly decrease the vehicle delay and

improve the level of service. The conversion of two-way traffic to one-way traffic results in some intersections having only one unconflicted right turn onto the one-way street. This is the case at Whipple/Stafford.

- Some intersections report a delay of 0. The TRAFFIX analysis package does not assign a delay value for a right turn from a major street onto a one-way street because there are no conflicting movements.

The mitigation strategies contained in the Partially Revised Draft Program EIR are appropriate for a first-tier analysis. Specific mitigation measures will be developed in the second-tier project-level analysis if it is determined that lane closures are still required after design refinement.

56-108

The new Section 3.18.3C, on Pages 4-4 and 4-5 of the 2012 Partially Revised Draft Program EIR, is intended to replace this same section in the 2008 Program EIR. Some of the impact descriptions provided in this Partially Revised Draft Program EIR, including that relating to the generation of waste pavement, imply that the impact would only result from Monterey Highway construction when in fact they would occur as a result of other highway improvement projects. This text has been clarified in the 2012 Partially Revised Final Program EIR.

56-109

Commenters have selectively quoted technical points made by the Peer Review Panel without noting the conclusion of the Panel in the same August 2011 report that they were "...satisfied with the documentation presented in Cambridge Systematics (2011), and conclude that it demonstrates that the model produces results that are reasonable and within expected ranges for the current environmental planning and Business Plan applications of the model."

The specific points quoted in the comment from the Peer Review Panel's August 1, 2011 Report are not about the entire model, but about specific elements, and misstate the Panel's overall assessment:

- The quote from Page 6 of the August 1, 2011, Report has to do with the constraint on the coefficient for HST headways, and is followed by significant discussion about the process as well as comparative data, and finishes with the statement: "Therefore we conclude that in the end, this problem with the model did not misrepresent traveler behavior in important ways." (p. 7, lines 2 & 3.)
- The Page 7 quote is extracted from a longer discussion about the possible excessive use of constants. Omitting the first four sentences changes the Panel's judgment that the issue is of minor practical importance into an apparent serious flaw. The omitted sentences say: "In Section 4.5 of our first report we criticized the excessive use of alternative-specific constants. The fear was that this would cause the model to be unrealistically unresponsive to changes, or to display paradoxical responses to changes in conditions. The extensive documentation provided to us by CS, in response to our first report, does not reveal such unrealism or paradoxical behavior. Therefore, this originally perceived problem with the model does not seem to be adversely affecting its behavior. In particular, we now think that the magnitude of alternative specific constants is neither an indication of poor model fit nor of inadequate representation of the impact of operational or travelers variables on behavior."

The two reports by the Peer Review Panel indicate that the model as a whole functions reasonably. The Authority disagrees with the comment's characterization that the Peer Review Panel accepted Cambridge Systematics' explanations with "obvious misgivings" The documentation Cambridge Systematics provided to the Peer Review Panel was extensive, and the review process robust. (Independent Peer Review Ridership and Revenue Forecasting Process Reference Materials, July 22, 2011 and August 1, 2011)

The ridership model has been the subject of a litigation challenge brought by commenters. As part of the Atherton litigation, the Superior Court concluded:

"Cambridge Systematics' analysis is clearly not inadequate or unsupported and Respondent reasonably relied on Cambridge Systematics' conclusions in

approving the ridership model after extensive debate regarding ITS's criticisms of the model. Respondent's thorough explanation regarding its selection is contained in the record."

56-110

The August 2010 San Francisco to San Jose Supplemental Alternatives Analysis Report for the second-tier HST project identifies three basic design options (A, B and B1) to be examined in the Draft EIR/EIS. These options represent "stitched together" alignments that would result in a four-track, fully grade separated railroad serving both HST and Caltrain between Transbay Transit Center and 4th and King in San Francisco and San Jose Diridon Station in San Jose. These design options were developed considering the following goals:

1. **Constructability:** Use uniform structure types that are well known in the rail industry and can be applied uniformly throughout the corridor
2. **Minimize Displacements:** Employ the narrowest track configuration to minimize ROW requirements
3. **Minimize disruption to the Caltrain system during construction:** Use three basic structure typologies (at-grade, aerial and trench) that can be constructed and staged in a way to that allows Caltrain to continue in operation during construction.
4. **Minimizes construction costs:** Develop Design Options A and B to minimize construction costs of the Statewide High Speed Train System while delivering a four-track, interoperable, grade separated railroad that can be shared by HST and Caltrain.
5. **Meet community needs:** Address city and public interest in alternatives that would not visually divide communities and are responsive to concerns regarding potential noise and vibration impacts.

The design options described as A, B and B1 in the Supplemental AA Report all represent conceptually feasible options that, to the extent possible, met the goals outlined above. It is true that some sub-

sections of the corridor have a single vertical option either in an at-grade, tunnel or aerial configuration. If the design and environmental process moves forward for a second-tier project in the San Francisco to San Jose corridor, towards a 15% design level and a complete Draft EIR/EIS, it is anticipated that the vertical profile options would be reassessed.

However, the Authority put its second-tier (project level) EIR/EIS work on hold as of May 2011. The conclusions of the Authority's 2010 alternatives analysis process is not binding, does not indicate any final decision, and will not constrain continued evaluation of options in cooperation with Peninsula cities if the Caltrain Corridor is part of the selected network alternative. Any second-tier project that focuses on a blended system approach would include continued evaluation of vertical profile options.

56-111

The Authority does not agree that the Altamont Corridor Rail Project, with adjustment, is a reasonable alternative for study in the current Program EIR for the HST in the Bay Area to Central Valley study area. The comment appears to conflate an HST alternative involving an Altamont alignment with the Altamont Corridor Rail Project (ACRP), a distinct and different effort. The projects differ in many ways including: (1) the purpose and need/project objectives, (2) the design criteria (and resulting operational features), (3) and the ridership market addressed

The statewide HST system has been developed for a purpose and need separate from the ACRP. Whereas the HST system is focused on interregional connections between the major markets in northern California, Southern California, and in the Central Valley, the ACRP purpose is to serve regional trips and act as a feeder to the intercity HST system. Accordingly, the ACRP alignment represents a different approach to the original HST Altamont Pass alternatives (discussed in the Program EIR); with a design facilitating operating speeds lower than those of HST and avoiding impacts associated with greater speeds, including noise, vibration, and requirements for additional right-of-way and structures. Through its alignment and station location alternatives, the ACRP has been developed to maximize *regional* ridership. (Altamont Corridor Rail Project, Notice

of Preparation, 2009; Altamont Corridor Rail Project, Preliminary Alternatives Analysis, 2011.)

However, tailoring the design of the ACRP to meet a regional trip-focused purpose and need and to avoid the additional impacts associated with HST operations necessarily diminishes objectives related to the intercity travel market addressed by the statewide HST Project, most notably travel speed and directness of routing. Thus, gains in regional ridership that would accrue to the HST Project as a result of utilizing the ACRP route would be offset by a decrease in intercity HST ridership, as compared with the use of an alignment designed solely for HST services, whether across Altamont Pass or Pacheco Pass. The Authority therefore disagrees with the statement in the comment that the proposed alternative would yield 108.5 million riders.

For example, the proposed alternative that would follow an Altamont Corridor Rail Project slower speed alignment from Modesto to San Jose would have a slower top speed and would be on the order of 25-40 minutes slower than the Altamont Pass network alternatives examined in the 2008/2010/2012 Program EIR analysis. The optimal non-stop run time from Tracy for a full speed option over the Altamont Pass into San Jose in the 2008 EIR/S document is 25 minutes, without any pad for operations contingency (Appendix 4E of 2008 Final Program EIR). In the Preliminary Alternatives Analysis Report for the ACRP, Appendix E shows run times with similar assumptions for the alternatives carried forward by segment, which when added show between 45 and 60 minutes for the Tracy to San Jose segment. In addition, the reversal of direction and the activation of control from the other cab compartment will likely add several minutes to the time normally required in the station to unload and board passengers. The slower speed and added travel time to reach San Jose would lower ridership, actually reducing ridership below the ridership for an HST Altamont Pass network alternative with San Jose terminus of 94.6 million riders.

The comment also notes that an alignment that travels over the Altamont Pass, down to San Jose, and then up the Peninsula would avoid the operational issue associated with reduced frequency of trains to San Francisco and San Jose that reduces ridership. As

indicated in Chapter 6, the blended system approach would involve a more limited train frequency on the northern end section of the HST system, making the split in service and reduced frequency a less important factor than previously considered for all network alternatives that would serve more than one city via a split in the line. (Parsons Brinckerhoff, Technical Memorandum on Alternatives Suggested in Comments on Partially Revised Draft Program EIR, April 2012.)

The comment summarizes four major environmental issues associated with the HST connection between the Bay Area and Central Valley. The comment limits community impacts to the Peninsula, however, and fails to recognize that the Program EIR identified impacts to communities across the alignments in the study area. Moreover, it is not correct to characterize an HST alternative as being capable of avoiding all impacts. There are environmental impact tradeoffs with any of the network alternatives, as discussed in Chapter 6.

56-112

The 2008 Final Program EIR, as supplemented by the 2010 Revised Final Program EIR and this 2012 Partially Revised Final Program EIR, analyzes 21 networks utilizing the Altamont Pass and Pacheco Pass alone or in tandem. This range includes an Altamont Pass Network Alternative with a terminus in San Jose. As noted in the comment, due to this alternative meeting the HST performance criteria in Chapter 2 of the 2008 Final Program EIR, including a fully dual track mainline and off-line station stopping tracks as well as capable of speeds in excess of 200 mph, this alternative achieved a trip time of 2 hours 19 minutes from San Jose to Los Angeles. Adding a San Francisco to San Jose leg for illustrative purposes would result in a 2 hours, 39 minute travel time from San Francisco to Los Angeles. The preferred Pacheco Pass network alternative would achieve a trip time of 2 hours and 9 minutes from San Jose to Los Angeles (and 2 hours 39 minutes from San Francisco to Los Angeles. (2008 Final Program EIR, Table S-8-1.)

The ACRP alignments have been designed for modern regional rail operations, but not for 220 mph high-speed service. ACRP stations would have only two tracks and there would be no passing tracks to

permit high-speed operations. As proposed, the ACRP alignments would be designed to accommodate HST vehicles but not HST service (high-speed trains could travel on ACRP tracks, but at conventional speeds). Thus, the ACRP alignment from the HST mainline would provide a longer, slower route between the Merced wye and the Bay Area (about 55 mph at high speeds between the wye and Manteca then about 70 mph at conventional speeds to San José) than the preferred Pacheco Pass alternative (120 mph at high speeds). Alternatives developed for the Altamont Corridor Rail Project identified to be carried forward in the Preliminary Alternative Analysis all include speed-limiting curves, due to the trade-offs between speed and environmental impacts. These limit speeds at locations along the EB-4, EB-5, and EB-6 alternatives between Santa Clara and Milpitas to 55mph. Similar speed limiting curves exist in Livermore for the TV-2a, TV-2b, TV-2C, and TV-4 alignments. Similar speed-limiting curves exist on the Pacheco Pass alignment where the alignment makes an "S" curve over the I-280/SR 87 interchange in San Jose.

It would not be possible for a train using the ACRP alignment then running blended up the peninsula to meet the mandated travel time between Los Angeles and San Francisco. Even if the peninsula line were eventually converted to high-speed service the longer, slower trip between Manteca and San José would prevent statewide trains from meeting the mandated travel time if they used the ACRP route. Any ACRP operation would be on the order of 25-40 minutes slower than the Altamont alternatives examined in the 2008 PEIR/EIS analysis. The optimal non-stop run time from Tracy for a full speed option over the Altamont Pass into San Jose in the 2008 EIR/S document is 25 minutes, without any pad for operations contingency (Appendix 4E of the Altamont Preliminary AA). In the Altamont Corridor Preliminary Alternatives Analysis, Appendix E shows run times with similar assumptions for the alternatives carried forward by segment, which when added show between 45 and 60 minutes for the Tracy to San Jose segment. In addition, in San Jose the reversal of direction and the activation of control from the other cab compartment will likely add several minutes to the time normally required in the station to unload and board passengers. Thus the

run times that are already slower as shown earlier for a blended Altamont A1 scenario would be a further 25-40 minutes slower.

The comment indicates that the Altamont Corridor Rail Project San Francisco/San Jose proposal would greatly reduce environmental impacts. Development of the HST system alignments in the Program EIR have been based on balancing the project's objectives and fundamental purpose while minimizing environmental impacts. Alternatives developed for the Bay Area to Central Valley Program EIR had similar speed-limiting curves on both Pacheco and Altamont alignment alternatives. Again, the presence of speed-limiting curves is the result of balancing potential travel times against environmental and engineering issues.

While the ACRP is being designed with conventional rail criteria (e.g., curves are sharper than for HST) it still will require new right-of-way and, like all major infrastructure projects, it will have some negative environmental impacts. It is unreasonable to assume that the ACRP will have no environmental impacts relative to the high-speed Altamont alternative evaluated in the EIR. The ACRP would have no impacts on San Francisco Bay (no bay crossing proposed) but it would have impacts in parts of the East Bay, crossing the East Bay Hills, in the Tri-Valley, crossing the Altamont Pass, and in portions of the San Joaquin Valley. For example, ACRP Alternative EB-5 on structure above I-880 in Hayward could have construction impacts on the highway, it potentially could affect 8 acres of wetlands and 1 acre of agricultural land in Santa Clara County. ACRP Alternative TS-1 connecting Tracy and Stockton could affect highway traffic on SR 120 and SR 4 could increase traffic on local streets in Lathrop, and the structure would have a visual impact on residential and institutional land uses in Lathrup. Any such impacts would be part of the proposed ACRP+SF/SJ Blended proposal. Replacing the preferred alternative with the proposed ACRP+SF/SJ Blended proposal would not eliminate all impacts associated with the suggest TRANSDEF proposal because all major infrastructure projects have impacts.

Finally, while the Authority's Draft/Final 2012 Business Plan promotes a blended system approach for the highly urbanized "book-end" sections, the commenter's proposal would have 125

miles of slower speed alignment as compared to 50 miles of slower speed alignment for the preferred Pacheco Pass network alternative if a blended approach is used for San Francisco to San Jose. (Parsons Brinckerhoff, Technical Memorandum on Alternatives Suggested in Comments on Partially Revised Draft Program EIR, April 2012.)

56-113

Table S.8-1, Summary of Characteristics and Impacts for the Network Alternatives of the 2008 Final Program EIR reported express travel times between San Francisco and Los Angeles of 2:38 utilizing a Pacheco Pass alignment and 2:36 using an Altamont Pass (via Dumbarton) alignment. Utilizing the most direct alignments from Niles Junction in Fremont to Redwood Junction in Redwood City, the distance via the UPRR Centerville Line and Dumbarton Bridge is approximately 16.4 miles based on the alignment identified in this Program EIR. Via the ACRP PAA EB-6 alignment, it is 16.8 miles to Santa Clara. Assuming a wye connection from the EB-6 line near the intersection of Central Expressway and Trimble Road to Caltrain at Bowers Avenue, including extensive property acquisition for the wye, this route distance would total 32.9 miles from Niles Junction to Redwood Junction. This would be an additional 16.5 miles greater than the most direct route via the UPRR Centerville Line and Dumbarton Bridge. Curve radii allowing travel at 100 mph, 80 mph, and 55 mph were obtained from the January 2011 Altamont Corridor Rail Project Alternatives Analysis.

Assuming a generous average speed of 100 mph, a routing via a wye in Santa Clara would increase travel time by 10 minutes over the Dumbarton route. Travel times were optimized for the initial statewide study, so any additional potential optimization would affect travel times all along the San Francisco to Los Angeles route for both Pacheco and Altamont alignments. In summary, a deviation from the Dumbarton Corridor to Santa Clara between Niles Junction and Redwood Junction is double the distance and add an additional ten minutes to EXPRESS, non-stop travel time.

We note in addition that the feasibility of a wye junction in Santa Clara to go north on the Caltrain Corridor as a method of reducing travel time to San Francisco is highly speculative. Santa Clara is a

very densely developed area. As shown in the figure below, departing from existing transportation corridors to create a new “wye” connection would be highly disruptive. The new right-of-way for the wye connection would require acquisition of many developed properties, and the junctions allowing the tracks to split from the EB-4, EB-5, and EB-6 or the Caltrain line would require two additional tracks parallel to the through tracks. These additional tracks would allow diverging trains to leave the main tracks, and pass over or under the main tracks. This would result in a length of four-track alignment along the eastbound right-of-way and a six-track alignment along the Caltrain right-of-way.



56-114

The comment is not correct in stating that the Altamont Corridor Rail Project's key difference from Altamont Pass network alternatives is avoiding the Don Edwards National Wildlife Refuge. The 2008 Final Program EIR studied several Altamont Pass network alternatives that would avoid the Don Edwards National Wildlife Refuge. This included: Altamont Pass with Oakland and San Jose termini; Altamont Pass with San Jose terminus; Altamont Pass with Oakland terminus; Altamont Pass with Union City terminus; Altamont Pass with San Francisco, San Jose, and Oakland termini with no Bay crossing.

The 2011 Altamont Corridor Rail Project Preliminary Alternatives Analysis Report expanded the examination of environmental impacts to inform alignment alternative designs to identify and reduce potential environmental impacts of the HST alternatives, utilizing the design flexibility associated with a slower speed, regional rail service. While the commenter's Setec proposal from 2010 may have avoided sensitive areas immediately along Niles Canyon and Sunol Creek, protected lands, identified by the California Department of Conservation, often extend far beyond the immediate riparian corridor. Much of the Sunol Valley and rural area along Arroyo Valley south of Livermore are protected lands. The location of alignment alternatives for HST that were considered but not carried forward for further study differ in the Niles Canyon and Sunol Creek areas compared to those for the slower speed, regional rail service identified in the 2011 Altamont Corridor Rail Project AA which are south of SR-84. The Altamont Corridor Rail Project AA proposes a South of Livermore alternative in a 7-mile tunnel under the Arroyo Valley.

56-115

The comment is incorrect that the statement in Chapter 6 regarding the relative effect of Union Pacific Railroad's refusal to allow use of its rights of way is a greater challenge for Altamont Pass network alternatives than Pacheco Pass network alternatives. The 2010 Revised Final Program EIR, Chapter 3, includes an illustration of the interface of the alignments in the study area with UPRR. This evidence supports the conclusion that while an interface with UPRR

is involved with both passes, it is measurably more challenging for Altamont Pass network alternatives.

UPRR's refusal to allow use of its rights of way is a consideration for the Altamont Corridor Rail Project as well. It is not entirely clear how to apply the comments to the ACRP San Francisco/San Jose proposal, (the comments discuss blended service along the Caltrain corridor, avoiding a Dumbarton crossing (as the commenter notes use of ACRP EBWS-1 alignment and states "such a route, in combination with the blended system approach, would eliminate the most serious environmental impacts of any network alternative studied to date"), and adapting BART's Dublin line for HST and regional service). This response assumes an Altamont Pass crossing, then an alignment south towards San Jose before utilizing Caltrain to access San Francisco, and/or a potential wye at Santa Clara as described by the commenter. For illustrative purposes only, this response also assumes a second HST line from a junction in the Livermore area that would follow the median of I-580, replacing BART at least as far as the Bayfair Station in San Leandro, as described by the commenter.

There are differing levels of interaction with the Union Pacific Railroad which the commenter has blurred. The Authority is working in all sections throughout the statewide system to avoid interfering with any freight railroad's operations. In short, beyond mitigable construction impacts such as possible shooflys, the HST project would not impact a freight railroad's operations, although there might be cases where the HST purchases and utilizes excess right-of-way from the existing railroad that the railway does not need for its operations.

As stated, UPRR has held a position "denying use of its rights-of-way for HST tracks." UPRR also has stated its displeasure with interference with the spur tracks leading from its right-of-way to adjacent businesses and potential future businesses. This is a different case from that described in the preceding paragraph. While UPRR may have a right-of-way that could accommodate HST without interfering with UPRR's operations, HST must plan to be implemented adjacent to the UPRR right-of-way.

To implement a HST route via Altamont, even a slower speed ACRP, there are many locations where not being able to use a portion of a UPRR right-of-way, even in locations where the right-of-way is so wide that HST could be placed such that it wouldn't interfere with UPRR operations, would require extensive property acquisitions adjacent to the UPRR. These locations include the crossing of central Tracy, between Pleasanton and Livermore, and in the Fremont area. If the commenter's Dublin HST line is considered, similar impacts to the UPRR would occur if the line were assumed to extend north towards Oakland from the Bayfair BART Station.

The commenter states that ten significant and unavoidable impacts from a Pacheco Pass alignment would be eliminated with the Altamont Corridor Rail Project San Francisco/San Jose proposal. The Partially Revised Draft Program EIR Table 1-1, Summary of Environmental Impacts and Mitigation Strategies, lists them. It is unclear how the commenter has determined that an ACRP alignment would eliminate the following:

- Potential lane loss on the Peninsula or in Hayward- The network described by the commenter utilizes either the Caltrain Corridor from Santa Clara to San Francisco or the Caltrain Corridor from San Jose to San Francisco, as the Pacheco alternative would, so the impacts from potential passing tracks or grade separations even under a blended scenario would be the same. The blended alignment is a phase of eventual HST build out and environmental review must account for the project's build out. An alignment up the East Bay is more likely with an ACRP alignment, so impacts to lanes in Hayward are much more likely with that alignment.
- Construction impacts as the result of a HST project occur for any network or alignment, just in a different location.
- An interim station at Union City BART for an ACRP alignment or at San Jose Diridon Station for a Pacheco alignment would impact traffic. The Union City site is over two miles from the nearest freeway access, while San Jose Diridon is less than one-half mile, leading to potentially longer trips on local streets for passengers accessing the Union City interim station by auto.

- An interim station at Union City BART (or Bayfair) for an ACRP alignment or at San Jose Diridon Station for a Pacheco alignment would each impact connecting commuter rail service. Caltrain already provides express service (in varying service patterns) from San Jose Diridon to SFO/Millbrae and San Francisco. BART operates 12 trains/hour midday and peak that make all stops en route to San Francisco. Caltrain has projects planned to increase capacity significantly; BART's transbay service is near capacity with additional capacity requiring extensive expansion to access at its downtown San Francisco stations and a potential second bay crossing. Additional capacity to absorb HST passengers utilizing an interim station is more easily implemented for the Pacheco alignment, as the capacity increasing projects for Caltrain are able to be implemented incrementally.
- Grade separations would be constructed along either a Pacheco or Altamont HST alignment, creating similar impacts for similar types of separations.

Converting BART's Bayfair-Dublin line for HST use would require more effort than re-gauging the tracks. The loading gauge (or clearance envelope) for a HST train and a BART train are drastically different. While the width of a BART train is greater than a TGV Duplex, it is narrower than a Velaro D, which is the latest design for both the German Railways and new Eurostar trains.

It is the differences in the overall dimensions of the operating envelope that make the replacement of BART with HST a very daunting task. BART's operating envelope is approximately 14' high by 32' wide for two tracks, while HST is 27' high by 50' wide. The primary reason for this is that BART uses a low, electrical "third rail" to supply power to its trains, while HST is supplied with power by a suspended overhead wire, held aloft by poles along the tracks. The third rail is tucked in close to the tracks below the floor level of the cars. The poles for the HST's overhead wire are located a safe distance from the tracks, creating a much wider operating envelope.

Two obvious consequences of replacing BART with HST in the median of I-580 is that the rail operating envelope would need to be expanded horizontally into the existing interior freeway shoulders and travel lanes and that vertical clearances beneath existing

roadway overcrossings would need to be increased by approximately 10'-6" (assumes 16'-6" standard interstate freeway clearance) or 13'-0" (assumes 14'-0" BART clearance). Raising overcrossings would require grade changes to crossing roadways that could impact nearby intersections and business access, or require the reconstruction of multiple spans of connecting aerial ramps at both the I-580/I-238 and I-580/I-680 interchanges. Lowering the HST tracks would require additional width from the adjacent freeway to build retaining walls and could require the reconstruction of footings for overcrossings. Additionally, even if it is assumed that BART's current vertical profile in the I-580 median is suitable for HST, the additional dips to pass under overcrossings might not be feasible at some locations. Undercrossings for roads or waterways might also limit the locations where the HST track could be dipped under overcrossings.

Terminating the line where it intersects BART at the Bayfair Station would require development of a separate HST station and end of line facilities. Continuance on to Oakland would encounter similar right-of-way issues discussed for an East Bay HST line. The commenter's suggestion of continuing the line across San Lorenzo beneath Lewelling Boulevard and thence along the bay to a new bridge parallel to the San Mateo Bridge and thence along the San Mateo bayside to meet Caltrain somewhere near SFO would have almost three times the length of alignment crossing bay shorelines, wetlands and open water than a Dumbarton crossing, which leads to an assumption that it would have greater environmental impacts than other potential bay crossings.

56-116

The Authority disagrees that the introduction of a discussion of project phasing and specifically the "blended system approach" to construct a high speed train compatible system between San Francisco and San Jose constitutes the introduction of a new alternative that triggers recirculation of the Program EIR. The blended system approach is an implementation option for a second-tier project, not a first-tier network alternative identifying the corridor that will connect the HST between the Bay Area and the Central Valley. This is the way it is described in the Draft 2012

Business Plan, the Revised 2012 Business Plan, and the Partially Revised Draft/Final Program EIR. The manner in which a blended system approach would reduce impacts on the Caltrain Corridor is discussed in Chapter 5. This discussion has been supplemented with additional detail based on the Revised 2012 Business Plan and more information about how such a system would compare to a full-build on the Peninsula. Please refer to Standard Response 1 for a further discussion of the blended system approach.

56-117

The Authority disagrees that a blended system is a first-tier "alternative" that must be studied in a recirculated Program EIR. The blended system approach is an implementation option for a second-tier project, not a first-tier network alternative identifying the corridor that will connect the HST between the Bay Area and the Central Valley. A blended system would be evaluated as part of a project-level environmental evaluation.

Please refer to Standard Response 1 for a further discussion of the blended system approach.

56-118

The Revised 2012 Business Plan explains the value of a blended system approach for the highly urbanized "book-end" portions of the statewide HST system, including a potential section between San Francisco and San Jose. This possibility was noted in the 2008 Final Program EIR, Chapter 2. In addition, the Partially Revised Draft Program EIR, Chapter 5, explained how a blended system approach for San Francisco to San Jose would result in reduced environmental impacts as compared to a four-track, full build out HST system on the Peninsula. A more detailed evaluation of a blended system approach must be based on a more defined second-tier project. Please refer to Standard Response 1 for a further discussion of the blended system approach.

The UC Berkeley Institute for Transportation Studies (ITS) conclusions about the ridership model have been taken into consideration in the recent peer review of the forecasts by both the Authority's Independent Peer Review Panel. The Peer Review Panel has evaluated multiple factors in the model and concluded that it

performs reasonably and is an appropriate tool for planning purposes. Please refer to Response to Comment 56-109 for more on this topic.

56-119

The Authority does not agree that a blended system approach is an alternative to the first-tier project that must be studied in a recirculated Program EIR. Please refer to Response to Comment 56-117.

56-121

The blended system approach is not an alternative to the first-tier project, but rather an implementation strategy for the second-tier. Refer to Standard Response 1. The Revised 2012 Business Plan includes more information about the ridership implications of a blended approach as part of second-tier implementation of the statewide HST system.

Any ACRP operation would be on the order of 25-40 minutes slower than the most direct to San Francisco Altamont alternatives examined in the 2008 PEIR/EIS analysis. The optimal non-stop run time from Tracy for a full speed option over the Altamont Pass into San Jose in the 2008 EIR/S document is 25 minutes, without any pad for operations contingency (Appendix 4E). In the Altamont Corridor Preliminary Alternatives Analysis, Appendix E shows run times with similar assumptions for the alternatives carried forward by segment, which when added show between 45 and 60 minutes for the Tracy to San Jose segment. In addition, in San Jose the reversal of direction and the activation of control from the other cab compartment will likely add several minutes to the time normally required in the station to unload and board passengers. Thus the run times that are already slower as shown earlier for a blended Altamont A1 scenario would be a further 25-40 minutes longer. The effect of a 30 minute additional time would result in a drop in ridership for the Full System in 2030.

The Revised 2012 Business Plan indicates that a blended system approach for implementing the HST system could be an important component of the system that is profitable and would operate without a subsidy. In addition, Chapter 5 has been revised to

indicate more clearly that one of the benefits of a blended system approach is that the cost of implementation is lower. More informative cost comparisons must await a definition of what infrastructure improvements are involved in a blended system, a definition that will be developed as part of second-tier environmental review. It is reasonable to infer at this level of analysis that blended system operating costs would be higher on a per train mile basis as a result of the increased train miles from the more circuitous route and the increased travel time. Capital costs would be less for the blended system than a full-build alternative on the Peninsula as a result of deferral of grade separation and track work.

As described in Response to Comment 56-124, the Altamont Corridor Rail Project San Francisco/San Jose proposal is not a reasonable alternative for study in the Program EIR. As described in Response to Comment 56-112, the additional mileage and slow speed of the proposal would result in substantially fewer riders than any of the alternatives studied in the Program EIR, with the addition of a blended assumption. (Parsons Brinckerhoff, Technical Memorandum on Alternatives Suggested in Comments on Partially Revised Draft Program EIR, April 2012.)

56-122

The Authority disagrees that the Partially Revised Draft Program EIR improperly defers full analysis of phased implementation as discussed in the Draft 2012 Business Plan. Standard Response 1 explains the environmental impacts of phased implementation of individual second-tier projects to build individual sections of the HST. Chapter 5 of the Partially Revised Draft Program EIR disclosed that the longer duration of construction than previously anticipated will lead to benefits accruing more slowly. The analysis is general, but it is not deferred.

Chapter 5 of the Partially Revised Final Program EIR has been updated with additional information related to the Revised 2012 Business Plan, which has refined the phased implementation approach for the HST system as a whole, to reduce costs, implement improvements more quickly, and achieve transportation benefits earlier. The Revised 2012 Business Plan presents facts explaining why the project benefits, even with phased implementation, make

the project worthwhile in light of costs. These facts include, among others, that HST will address the critical need for intraregional mobility within California, will reduce congestion on the state's major highways and freeways, will reduce energy use and reliance on fossil fuels, and will greatly reduce the State's greenhouse gas emissions from transportation sources.

With the phased implementation, including the blended system approach, the anticipated ridership will be lower than what is described in the program EIR. Evaluations performed to generally assess the effect of a blended system approach on ridership forecasts for the Business Plan indicate that a blended approach between San Francisco and San Jose assuming a Pacheco Pass network alternative would likely reduce total system ridership by 5% relative to the full system with higher capacity. This reduction would in general apply as well to an Altamont Pass network alternative going to San Jose and then using a blended approach to San Francisco on the Peninsula. (Parsons Brinckerhoff, Technical Memorandum on Alternatives Suggested in Comments on Partially Revised Draft Program EIR, April 2012.)

The Authority does not agree with the comment that the Business Plan ridership forecasts must be applied for the Program EIR. The Business Plan ridership forecasts are different, and lower, than the forecasts for the Program EIR because the two documents have different purposes, and there are different assumptions used in the modeling for each.

The ridership forecasts for the Business Plan support the Authority's financial and investment planning for the HST system. The orientation of the Business Plan is to assess potential positive cash flow from operation of the HST system to help estimate private sector investment. To do this, HST fares are assumed to be relatively high (83% of airfare), reducing potential ridership but increasing net revenue. Other assumptions that contribute to reducing potential ridership include conservative assumptions about future population growth and trip-making patterns.

The Program EIR, on the other hand, supports the environmental analysis the Authority must undertake to comply with CEQA. The orientation of the Program EIR is to identify reasonable, higher levels

of ridership on the HST system to ensure the EIR adequately identifies and discloses adverse environmental impacts, and identifies mitigation strategies. The forecasts are based on more optimistic assumptions about future population growth than the Business Plan forecasts. In addition, the Program EIR presents a range of forecast that use a relatively low fare (50% of airfare) to describe adverse impacts, and a relatively high fare (83% of airfare) to describe beneficial impacts. The approach in the Program EIR is intended to be conservative in the depiction of both adverse impacts and project benefits.

56-123

Should the Authority select an alternative with a northern terminus at Union City BART, then project-level analysis of such an alternative would be required, including consideration of impacts on existing transit systems, stations, and service. As stated in the Partially Revised Draft Program EIR, the impact of a Union City terminus on BART service is "considered significant even with application of mitigation strategies. As second-tier, project-level environmental documents are prepared, the potential consequences of phased implementation on connecting BART service will be evaluated in more detail." (p. 5-8)

The Altamont Corridor Rail Project (ACRP), which is a separate project from the HST project, proposes regional rail service that could include a BART connection at Union City. The potential design and operation of this interface will be clarified in a Supplemental Alternatives Analysis Report currently being prepared. The impacts of the ACRP on Union City Station and BART system operations would be determined as part of a future project-level environmental analysis for the ACRP.

56-124

The comment conflates a HST project alternative involving an Altamont alignment with the Altamont Corridor Rail Project (ACRP), a distinct and different effort. The projects differ in many ways including: (1) the purpose and need, (2) the design criteria (and resulting operational features), (3) the ridership market addressed

and (4) the level of environmental analysis that has been performed to-date as well as the possible environmental effects.

The statewide HST Project has been developed for a purpose and need separate from the ACRP, which is to serve regional trips and act as a feeder to the intercity HST Project. Accordingly, the ACRP alignment represents a refinement of the original HST Altamont route (discussed in the Program EIR); with a design facilitating operating speeds lower than those of HST and avoiding impacts associated with greater speeds, including noise, vibration and requirements for additional right-of-way and structures. Through its alignment and station location alternatives, the ACRP has been developed to maximize regional ridership.

Specifically with regard to ridership potential, the ridership results for the Altamont and Pacheco alternatives evaluated in the RFPEIR and original Central Valley to Bay Area environmental document provide the only bona fide, “apples-to-apples” comparison of the potential to serve the Purpose and Need of the Statewide HST system.

However, tailoring the design of the ACRP to meet a regional trip-focused purpose and need and to avoid the additional impacts associated with HST operations necessarily diminishes objectives related to the intercity travel market addressed by the statewide HST Project, most notably travel speed and directness of routing. Thus, gains in regional ridership that would accrue to the HST Project as a result of utilizing the ACRP route would be offset by a decrease in intercity HST ridership, as compared with the use of an alignment designed solely for HST services, whether across Altamont Pass or Pacheco Pass.

The second difference between the HST Project and the ACRP is the level of environmental analysis that has been conducted to-date for each. The ACRP Preliminary Alternatives Analysis Report (PAA) does not provide a full assessment of impacts comparable to that which has been completed for the HST Project. Thus, the supposed superiority of the ACRP with respect to environmentally sensitive areas cannot be established based on existing documentation. The comment makes claims that can be substantiated only by project-level environmental analysis for the ACRP, yet to be performed. The focus and analyses of the separate ACRP and HST Projects are not

equivalent, and do not support conclusions of greater ridership and fewer environmental impacts for HST on an ACRP route, as made in the comment.

The HST Program EIR, however, does provide an analysis considering the HST Altamont Route and HST Pacheco Routes as alternatives addressing the same purpose and need, and at the same level of environmental analysis. Comparing the two alternatives on equal footing, the document finds that the HST Pacheco Route minimizes impacts on wetlands, waterbodies, and the environment; exhibits operational benefits and minimizes logistical constraints; takes better advantage of investment synergies in the Caltrain Corridor; and enjoys greater political support.

The comment raises utilization of the Caltrain Corridor and political support as additional arguments in favor of an ACRP routing for HST services. The PAA characterizes the ACRP as “a regional intercity and commuter passenger rail project between Stockton and San José,” and thus would not use the Caltrain Corridor, aside from a short interval between San José and Santa Clara. Political support plays an important role in minimizing local impacts and securing funding for a project, and should not be discounted as a valid evaluation criterion. Nonetheless, the political considerations referenced by the comment pertain to the HST Altamont Route, not the ACRP.

While an ACRP routing for HST would share some of the advantages of the HST Altamont Route in passing near SJC, and relieving freeway capacity constraints, other claims made in the comment cannot be supported by the ACRP’s Purpose and Need or the existing analysis contained in the PAA. The ACRP, as currently defined, does not pass near SFO and is not intended to replace a BART extension to Livermore; conversely, the PAA recognizes “the need to accommodate a future planned BART extension [to Livermore]” (p. S-1). Finally, as introduced in the preceding discussion of this response, investment in the ACRP alone would not provide the same benefits to statewide and regional travel markets as an HST Pacheco Route combined with the ACRP. An “ACRP San Francisco/San José alternative” would necessarily involve compromises affecting its potential to serve both statewide and regional travel markets as

effectively as the HST Preferred Alternative in combination with the ACRP.

56-125

The description of impacts in Section 6.2 is consistent with the description of impacts provided in Section 8.5 of the 2008 Program EIR and Section 7.2 of the 2010 Revised Final Program EIR, and does not represent a change from the 2010 Revised Final Program EIR as the commenter suggests.

Furthermore, the Authority disagrees with the assertion that the newly identified impacts were not taken into consideration in the recommendation of a preferred alternative. As discussed in Section 6.2.1 of this 2012 Partially Revised Draft Program EIR, a "multitude of factors influenced the prior designation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as preferred alternative in the 2008 Final Program EIR and the 2010 Revised 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 in this document. The environmental trade-off for reducing the relative amount of residential and business displacement to implement the HST by using existing transportation corridors (Monterey Highway and Caltrain Corridor) results in noise and vibration, traffic and construction effects. On balance, these environmental impacts, while carefully considered and important, do not change 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" (Pages 6-3 and 6-4). This weighing of environmental versus built environment impacts falls squarely in the context of the newly identified significant (and unavoidable) impacts.

56-126

The Authority does not agree with the comment that the Altamont Corridor Rail Project San Francisco/San Jose option is a reasonable alternative that must be studied in a revised and recirculated Program EIR. An EIR is not required to address every "imaginable" project alternative. The Program EIR has addressed a reasonable range of alternatives that has fostered informed decision making and public participation.

56-127

Comment acknowledged.

Submission 71 (Graham Kaye-Eddie, Makabusi LLC, February 24, 2012)



MAKABUSI, LLC

URBAN DESIGN, PLANNING & MANAGEMENT CONSULTANTS

2/21/2012

California High-Speed Rail Authority
ATTN: Mr. John Mason
770 L Street, Suite 800
Sacramento, California 95814

4005
02-21-12P01118 RCVR

Via email: BayArea-CentralValley@hsr.ca.gov

RE: Partially Revised Draft Program EIR

Dear Mr. Mason,

71-477

This letter is submitted under the ruling of the California State court of appeals decision regarding the re-circulation and re-evaluation of some of the impacts of the proposed California High Speed Rail Project (Project). The Project, as currently being reviewed has areas of concern that will cause significant environmental impacts under CEQA.

Referencing Chapter 5 NEW INFORMATION AND CHANGED CONDITIONS SINCE SEPTEMBER 2, 2010, PRIOR DECISIONS, Page 5-2, we note that there are impacts regarding land use including but not limited to, grade issues, loss of habitat, loss of Class A farmland, loss of dwellings, commercial, municipal and religious structures, noise and vibration in urban and rural settings, alignment parameters that determine routes relating to only the steel rail line technology (Quote from the City of Bakersfield response to the EIR).

71-478

We are requesting the examination of an alternative technology that has not been properly examined in any environmental document that we have reviewed to date, including the current revised EIR, that as an alternative technology, magnetic levitation (maglev) Evacuated Tube Transportation (ET3) be reviewed and analyzed in light of the above mentioned impacts. The maglev is the superior environmental choice when considered in comparative assessment for less environmental impacts, as well as, many other technological factors.

We think it is appropriate to compare ET3 Maglev with CAHSR in 4 basic categories : Performance; Vehicle; Guideway and Cost. We have shown the specific items under each for comparative evaluation. These categories are not mutually exclusive. Others might be included to further clarify elements deemed necessary.

Sincerely,

Graham Kaye-Eddie
Makabusi LLC

Cc: Governor Jerry Brown
David Valenstein, USDOT Federal Railroad Administration
Zachary Simmons, US Army Corps of Engineers
Renee Donato Nelson, Clean Water and Air Matter (CWAM)
Virginia Gennero, City of Bakersfield, City Attorney

1
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Response to Submission 71 (Graham Kaye-Eddie, Makabusi LLC, February 28, 2012)

71-477

The Authority selected steel-wheel-on-steel-rail technology as part of the certified 2005 Final Statewide Program EIR/EIS. Maglev technology was considered and rejected at that time. Maglev was eliminated since it “would not allow for direct HST service to major intercity travel markets and therefore would not meet the purpose and need and objectives for the proposed project.” The selected steel-wheel-on-steel-rail technology is extensively proven in intercity operations throughout the world. This type of technology allows for sharing of tracks at reduced speeds with other compatible conventional rail services. This will also produce a greater cost savings during construction as there are a number of potential steel-wheel-on-steel-rail manufacturers able to compete for the opportunity to use their technology in California, ensuring the best product for the best price.

71-478

Refer to Response to Comment 71-477 above.

16 Response to Comments from Individuals

Submission 4 (Steven Oiwa, January 6, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #4 DETAIL

Status : Pending
Record Date : 1/6/2012
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 1/6/2012
Submission Method : Website
First Name : steven
Last Name : oiwa
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City :
State : CA
Zip Code : 94542
Telephone :
Email : ichi4035@gmail.com
Cell Phone :
Email Subscription : All Sections
Add to Mailing List : Yes
Stakeholder Comments/Issues : do we need HST in calif. ? think before you spend \$100B into this we need a school, police, and fire and many other project we must do. and \$100B is just starting point i will said over \$150B after it finished. can you see people are use this \$HST in calif. please think AMT we have it not making money. if you are ask penny from us then go. but you ask one cent from us then STOP now.
EIR Comment : No

4-75

Response to Submission 4 (Steven Oiwa, February 22, 2012)

4-75

California's population is growing rapidly and, unless new transportation solutions are identified, traffic will only get worse and airport delays will continue to increase. The proposed 220-mph HST system would provide lower passenger costs than travel by air for the same city-to-city markets. It would increase mobility while reducing air pollution, decreasing dependence on fossil fuels, and protecting the environment by reducing greenhouse gas emissions, and would promote sustainable development. By moving people more quickly and at less cost than today, the HST system would boost California's productivity and also enhance the economy.

High-speed rail systems around the world cover their own operating costs, which is a key reason why 13 nations have built almost 10,000 miles of high-speed rail lines in the last few decades and why 24 countries are planning and building another 16,000 miles. The financial analysis of the California HST system, described in the 2012 Draft Business Plan, clearly demonstrates that the ridership and revenues are well able to cover the costs of operating the system, meaning that no operational subsidy would be required. The HST project is being financed through a combination of federal and state funds, including the ARRA, the federal High-Speed Intercity Passenger Rail Program, and California Proposition 1A's Safe, Reliable High-Speed Passenger Train Bond Act adopted by state voters in November 2008. To date, California has \$6.33 billion to invest in the development of its HST project. The cost estimate presented in the 2012 Draft Business Plan (\$98 billion) takes into account the latest design information, adds the cost of inflation to anticipate increased costs from that source, and includes a contingency fund. The inflation and contingency fund provisions (totaling approximately \$43 billion) provide a realistic view of the actual costs of construction.

For further information on project purpose and need, refer to Chapters 1 and 2 of the 2008 Final Program EIR and Chapter 1 of the 2012 Draft Business Plan.

Submission 5 (Mark Schack, January 6, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #5 DETAIL

Status : Pending
Record Date : 1/6/2012
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 1/6/2012
Submission Method : Website
First Name : Mark
Last Name : Schack
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City :
State : CA
Zip Code : 94403
Telephone :
Email : fbslug@hotmail.com
Cell Phone :
Email Subscription : San Francisco - San Jose
Add to Mailing List : Yes

5-70

Stakeholder Comments/Issues :
 For years, I was very excited about the prospect of high-speed rail in our state. As a Bay Area resident who grew up in Los Angeles, I would welcome the opportunity to avoid both Highway 5 and LAX.

 However, I now strongly encourage you to cancel this project for one reason only: money. Our state's public universities are crumbling and our K-12 school districts are being stretched thin. Our state employees are dealing with furlough days, pay freezes, and/or increases of responsibilities due to departmental downsizing.

 We already are billions of dollars short of what we need. So, I strongly oppose taking on an expense of tens of billions of dollars — even though that would be spread over many years — until our existing obligations are met.

 Sincerely,
 Mark Schack
EIR Comment : No

Response to Submission 5 (Mark Schack, February 22, 2012)

5-70

The Authority disagrees with the assertion that the state can't afford the HST project. One purpose of the 2005 Statewide Program EIR/EIS was to evaluate the consequences of meeting the state's transportation needs over the coming decades. That document identified the environmental and economic cost of proceeding with a "do nothing" alternative as well as with a "modal alternative" that would expand freeways, airports, and conventional rail systems without building the HST project. The conclusion of the 2005 Statewide Program EIR/EIS process was that the HST system was a less costly alternative and less environmentally damaging alternative overall.

Submission 6 (Ken Bone, January 7, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #6 DETAIL

Status : Pending
Record Date : 1/7/2012
Response Requested : No
Stakeholder Type : CA Resident
Submission Date : 1/7/2012
Submission Method : Website
First Name : Ken
Last Name : Bone
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City :
State : CA
Zip Code : 95020
Telephone :
Email : fishbone1@earthlink.net
Cell Phone :
Email Subscription :
Add to Mailing List : No
Stakeholder Comments/Issues : The California High-Speed Rail project is now too expensive. Please abandon this project now. It will never pay for itself, stop this project now! Do not spend any more funds on this project!
EIR Comment : No

6-69

Response to Submission 6 (Ken Bone, February 22, 2012)

6-69

The Authority disagrees with the assertion that the HST project is too expensive. One purpose of the 2005 Statewide Program EIR/EIS was to evaluate the consequences of meeting the state's transportation needs over the coming decades. That document identified the environmental and economic cost of proceeding with a "do nothing" alternative as well as with a "modal alternative" that would expand freeways, airports, and conventional rail systems without a HST project. The conclusion of the 2005 Statewide Program EIR/EIS process was that the HST system was a less costly alternative and less environmentally damaging alternative overall.

Furthermore, high-speed rail systems around the world cover their own operating costs, which is a key reason why 13 nations have built almost 10,000 miles of high-speed rail lines in the last few decades and why 24 countries are planning and building another 16,000 miles. The financial analysis of the California HST system, described in the 2012 Draft Business Plan, clearly demonstrates that the ridership and revenues are well able to cover the costs of operating the system, meaning that no operational subsidy would be required. The HST project is being financed through a combination of federal and state funds, including the ARRA, the federal High-Speed Intercity Passenger Rail Program, and California Proposition 1A's Safe, Reliable High-Speed Passenger Train Bond Act adopted by state voters in November 2008. To date, California has \$6.33 billion to invest in the development of its HST project. The cost estimate presented in the Revised 2012 Business Plan (\$68 billion for Phase 1 Blended System) takes into account the latest design information, adds the cost of inflation to anticipate increased costs from that source, and includes a contingency fund. The inflation and contingency fund provisions (totaling approximately \$43 billion) provide a realistic view of the actual costs of construction.

For further information on project purpose and need, refer to Chapters 1 and 2 of the 2008 Final Program EIR and Chapter 1 of the 2012 Draft Business Plan.

Submission 7 (Minesh Shah, January 7, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #7 DETAIL

Status : Pending
Record Date : 1/7/2012
Response Requested :
Stakeholder Type : CA Resident
Submission Date : 1/7/2012
Submission Method : Website
First Name : Minesh
Last Name : Shah
Professional Title :
Business/Organization :
Address :
Apt./Suite No. :
City : Burlingame
State : CA
Zip Code : 94010
Telephone :
Email : mineshkiranshah@hotmail.com
Cell Phone :
Email Subscription : All Sections
Add to Mailing List : Yes
Stakeholder Comments/Issues :
EIR Comment : Yes

7-78

7-79

7-80

I am a resident of Burlingame, CA, and I just reviewed the Bay Area to Central Valley HST Partially Revised Draft Program EIR. In summary, I find the conclusions of this report completely unacceptable to me, my family, my community and the entire San Francisco to San Jose Peninsula area. The noise and vibration will significantly hurt property values, reducing property tax revenue, hurting schools and ultimately dividing and ruining the community. The traffic and construction impact is unacceptable, especially in an area where traffic is already an issue.

I am disappointed that our state continues to spend money on this initiative when there is such adverse impact to communities (and the business case is not sound). I strongly object to any further development of this initiative, especially in the Bay Area peninsula.

Response to Submission 7 (Minesh Shah, February 22, 2012)

7-78

As noted in Chapter 3.7, Land Use, in the 2008 Final Program EIR, the San Francisco to San Jose Corridor would be primarily within an existing active commuter and freight rail corridor and therefore would not constitute any new physical or psychological barriers that would divide, disrupt, or isolate neighborhoods, individuals, or community focal points in the corridor. This resulted in a finding of no community cohesion impacts at the program level. In addition, construction of grade separations where none previously exist would improve circulation between neighborhood areas. The Authority Board committed in July 2008 to investigate profile alternatives to avoid and minimize potential impacts, including trench, tunnel, aerial, and at-grade between San Francisco and San Jose. Although the Authority has rescinded its July 2008 program decision, the commitment to examine profile alternatives has been carried forward into the project-level alternatives screening.

Please refer to Standard Response 6 in the 2010 Revised Final Program EIR regarding property values and effects on communities.

7-79

The traffic analysis contained in the Partially Revised Draft Program EIR identified the existing traffic conditions at specific locations along the Peninsula. At some of those locations the analysis indicated that existing traffic operations are at or near capacity. With potential lane closures as a result of the HST project, the analysis indicated that traffic conditions could deteriorate at some locations, resulting in potentially significant impacts. The analysis also documented the future traffic conditions both without and with the HST project. The future traffic operations projected a worsening of traffic conditions by 2035. Again, when the potential lane closures are included, traffic operations deteriorate at some locations resulting in significant traffic impacts.

Chapter 4 provides an analysis of construction impacts, including traffic impacts during construction, and includes mitigation strategies.

7-80

The Authority disagrees that the "business case" for the statewide HST system is not sound. The 2012 Draft Business Plan for the HST system describes how the system will be built in phases over time. It utilizes conservative projections of both available funding and ridership to explain the feasibility of the system, and explains in detail how a financially viable system can be built and operated.

Submission 10 (John Wotzka, January 9, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #10 DETAIL	
Status :	No Action Required
Record Date :	1/9/2012
Response Requested :	
Stakeholder Type :	CA Resident
Submission Date :	1/9/2012
Submission Method :	Website
First Name :	John
Last Name :	Wotzka
Professional Title :	self intrest for future intrest.
Business/Organization :	Self,public as graduated mechanical engineer.
Address :	
Apt./Suite No. :	
City :	San Diego
State :	CA
Zip Code :	92101
Telephone :	619-446-7690
Email :	johnwotzka@gmail.com
Cell Phone :	
Email Subscription :	All Sections
Add to Mailing List :	Yes

10-64

Stakeholder Comments/issues :

I am going to SANDAG meeting here downtown in San Diego. I am doing research to keep up with the development of the High Speed Rail project. I have a June 2011 article that states a project at \$42E9 for 432 miles from San Francisco to Los Angeles. The San Diego Union-Tribune, november 30, 2011 pp A1 article states a project at \$98E9 for 432 miles from San Francisco to Anaheim. The segment to San Diego and Sacramento are not in th latest financing plan as implied to have been sold to the voters in 2008, as \$45E9 for 800 miles. Lynn Schenk wrote in 2008 that the San Diego segment should be built first and voters want a trip from San Diego to Los Angeles in 78 minutes at 220 mph with a 286 mile trip. Lynn has been working on High Speed Rail in California since 1970s. This is 718 miles leaving only 82 miles to get to Sacramento from San Francisco. A revised business plan released November 1, 2011 estimates a cost of \$98.5E9 to \$118E9 for a project from San Francisco to Anaheim if completed by 2033, but without the segments to San Diego and the Inland Empire. It is not clear if the Inland Empire means to Sacramento. This would make the trip from San Francisco to Anaheim in 65% of 800 miles= 520 miles. The San Diego Union-Tribune, January 4, 2012 article states an initial section, a segment and the project with costs and miles. The article talks about :

- a) A State appointed panel.
- b) High Speed Rail Peer Review Group.
- c) California Labor Federation.
- d) California high-speed rail officials.
- e) High Speed Rail Authority.
- f) State legislative analyst.

and a total cost of the project now being \$98E9. The groups c&d are clear but a,b,&d are confusing and seem to be out of place. Group f is a check and balance to the state. I believe it would be much more clear to the public if the language of section, segment and project be defined graphically and kept constant in future media articles and the project be given a name with all the segment so we can use and acronym and relate the segments to the whole. It would also be a good idea to show each segments cost/ mile or equal cost/mile parts so we can see where the more expense parts are. John G Wotzka, Downtown San Diego.

EIR Comment :

No

Response to Submission 10 (John Wotzka, Self, Public As Graduated Mechanical Engineer, February 22, 2012)

10-64

California has been planning a HST system since the formation of the Authority in 1996. When completed, the nearly 800-mile train system would provide new passenger rail service to more than 90% of the state's population. More than 200 weekday trains would serve the statewide intercity travel market. The HST would be similar to electrically powered systems now in operation in Europe and Japan, capable of up to 220-mile-per-hour (mph) operating speeds, with state-of-the-art safety, signaling, and automated train control systems. Phase 1 of the HST system would connect and serve the major metropolitan areas of California, extending from San Francisco to the Los Angeles Basin. Phase 2 would add connections from Sacramento in the north to San Diego in the south.

The cost of the statewide HST system has been evaluated in the Revised 2012 Business Plan, which was made available to the public on April 2, 2012. The current cost estimate has increased significantly since the last estimate in 2009, which was based on the programmatic conceptual design. That estimate, covering the Full Phase 1 between San Francisco and Los Angeles/Anaheim, was \$36.4 billion in 2010 dollars. The Revised 2012 Business Plan estimate (in 2011 dollars) ranges from \$26.9 to \$31.3 billion for the IOS, \$41.3 to \$49.0 billion for the Bay to Basin system, and \$53.4 to \$62.3 billion for the Phase 1 Blended system (Revised 2012 Business Plan, pages 3-8, 3-9, and 3-10). Eighty to 85% of this increase is for additional viaducts, tunnels, embankment, and retaining wall/trenches directly attributable to changes in scope and alignment based on stakeholder input, environmental necessity, and improved knowledge of site conditions. To assess the reasonableness of the program's cost estimates, the Authority studied the most recent cost estimates against those of other operational high-speed rail projects. These include worldwide costs evaluated by the World Bank and improvements to the Northeast Corridor proposed by Amtrak. Of note, a cost comparison of different high-speed rail projects can only provide an order of magnitude indication of the current estimate's

reasonableness for the California program because every project has its own set of unique physical, environmental, and policy issues. This is particularly the case with European and Asian high-speed rail programs, built in different political and environmental settings.

Submission 11 (Joseph P. Thompson, January 12, 2012)

JOSEPH P. THOMPSON
Attorney at Law
8339 Church Street, Gilroy, CA 95020
Telephone (408) 848-5506; Fax (408) 848-4246
E-mail: TransLaw@PacBell.Net

January 6, 2012

Fax: 916-322-0827
Mr. Mehdi Morshed, Exec. Dir.
High Speed Rail Authority
925 L Street, Suite 1425
P. O. BOX 942874, MS-74
Sacramento, CA 95814

Re: Public Comment HSRA's Re- Revised Environmental Impact Report SF-San Jose-Gilroy-Merced

Dear Mr. Morshed,

11-523 Referring to my letters to you (copies enclosed), why are you ignoring truth in transportation? Why are you ignoring sound railroading? Why are you ignoring history? Why are you ignoring the will of the voters of California? Why are you ignoring the legislation from our State Legislature signed into law by our State Governor?

11-160 Please include these remarks as part of your official record of proceedings and these enclosed supplemental remarks about the re-revised EIR for the SF-San Jose-Gilroy-Merced Segment.

11-161 You remind me of the public sector transit advocates and supporters who cram taxpayer-funded transit down our throats so that public sector transit welfare recipients and public sector union employees and joint power authorities staff can enjoy our blood regardless of the damage that it does to our State. Like addicts who refuse to admit their addiction, you seem Hell-bent on your Leninism even though history, both world-wide and American and North American railroad history proves that your concept is fatally flawed and is not sound nor sustainable. I repeat what I said to the High Speed Rail Commission and then State Senator Quinten Kopp: High Speed Rail can only work in the private-sector. Otherwise, you'll just stick another blood-sucking leech on us like Amtrak, Caltrain, Lite Rail, and other public-sector boondoggles that fail every place, and every time that they've been tried around the world.

Respectfully yours,
[Signature]
JOSEPH P. THOMPSON, ESQ.

Encl.

11-526

JOSEPH P. THOMPSON
Attorney at Law
8339 Church Street, Gilroy, CA 95020
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November 10, 2010

Fax: 916-322-0827
Mr. Mehdi Morshed, Exec. Dir.
High Speed Rail Authority
925 L Street, Suite 1425
P. O. BOX 942874, MS-74
Sacramento, CA 95814

Re: Public Comment HSRA's Environmental Impact Report SF-San Jose-Gilroy-Merced

Dear Mr. Morshed,

Referring to my letter to you (copy enclosed), I am enclosing my supplemental remarks about the EIR for the SF-San Jose-Gilroy-Merced Segment.

Will you please add this supplement to the official record of these proceeds.

Future generations must know that you were warned.

Respectfully yours,
JOSEPH P. THOMPSON, ESQ.

Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

11-526

JOSEPH P. THOMPSON
 Attorney at Law
 8339 Church Street, Gilroy, CA 95020
 Telephone (408) 848-5506; Fax (408) 848-4246
 E-mail: TransLaw@PacBell.Net

January 5, 2010

Fax: 916-322-0827
 Mr. Mehdi Morshed, Exec. Dir.
 High Speed Rail Authority
 925 L Street, Suite 1425
 P. O. BOX 942874, MS-74
 Sacramento, CA 95814

Re: Public Comment HSRA's Environmental Impact Report SF-San Jose-Gilroy-Merced

Dear Mr. Morshed,

Thank you for allowing members of the public to comment on HSRA's second (judicially-required) EIR for the San Francisco-San Jose-Gilroy-Merced Segment.

Identity of Author. I am a graduate of San Jose State University, and have done post-doctoral study of transportation law and policy at the Mineta Institute at SJSU. I write only for myself, and not on behalf of a client or organization, but merely to express my personal reply to the EIR for the segment that includes Gilroy, where I have practiced law for more than 30 years.

Background. I here refer to and incorporate by reference: (1) my letters to you dated 3/23/09 and 3/10/04; (2) letter dated 2/23/09, amended 3/13/09, from Mr. J.S. Jerry Wilmoth, UPRR; (3) Map CA-13, CA-17a&b, and CA-18, *Railroad Atlas of North America, California and Nevada*, pp. 18, 22-23; and Wendell Cox & Adrian T. Moore, *The California High Speed Rail Proposal: A Due Diligence Report*, Reason Foundation, Sept. 2008; Legislative Analyst's Office, *The High-Speed Rail Authority*, March 17, 2009 (see attached to my letter to you 3/23/09).

Summary. Lenin convinced his fellow countrymen that Marx & Engels were right, with Trotsky's help, and Stalin's "persuasion" tactics. Did that make his philosophy right? No. Just like Lenin, CAHSRA's proponents are wrong. You remind me of heroin addicts who refuse to admit their addiction. Revelations since the election show what a disastrous idea you have proposed for this sad State, dominated by radical socialists in our Legislature, the League of California Cities, and the California State Association of Counties, and the public transit agencies and their public-sector unions. I think that history will be just as kind to the CAHSRA's proponents as it's been to Lenin. The people of California will rue the day that the Trojan Horse was approved in the guise of the Bullet Train.

As I said before, "The crucial question facing us with HSR's proposal was concisely stated by the Honorable Norman Y. Mineta: "The crucial question in transportation today is: What should

11-526

government do, and what should it leave to others."¹ The sound, sustainable answer to Secretary Mineta's "crucial question" lies in the private sector; not in the public sector. With free enterprise as a foundation, high speed rail's owners and investors can combine profitable freight revenue with losing passenger fares, rather than asking the maxed-out taxpayers of California for more tax subsidies for yet another public-sector passenger mode of travel.

Comment: Funding Source for Operations. The current proposal does not satisfy the requirements of sound railroading, while it adheres to the tax-dependent method of finance akin to Amtrak, Caltrain and urban mass transit, with only a very small fraction of the overall expenses paid for by the patrons. The underlying assumption that taxpayers can continue to pony-up the subsidies for more government-owned transport is wrong. History shows the proposal to be fatally flawed. All of the State-owned railroads in the Nation failed in 1837-1840. Lincoln knew personally about those failures, so when General Granville Dodge recommended to the President in 1864 that the government own the transcontinental railroad, Lincoln said "no." His theory, which ultimately worked, was that private enterprise own the railroads, but that the government would aid in their construction. When the Nation's railroads were nationalized during World War I, it only took 18 months before the government's mismanagement had brought all our railroads to a screeching halt. So, Congress reversed its previous decision and de-nationalized our railroads. In 1970 during debates in Congress on formation of the National Railroad Passenger Corporation (Amtrak), some members promised that Amtrak "would be profitable in three years." Amtrak has failed to break even, and requires ever-increasing tax subsidies to continue its operations. Our Nation paid dearly for Amtrak's subsidies because on 9/11/01 we did have Amtrak, but we did not have adequate airport security.

The north-south tonnage flows in California, on Hwy. I-5, US 101, and Hwy. 99, represent a source of funding that could, in a private-sector model, duplicate and exceed taxpayers' subsidies in the public-sector model as proposed in the EIR. The French government has announced that it will have Fedex freight transported by that nation's HSR starting next year, so those with experience in operating HSR in Europe have apparently resorted to freight revenue as a source of funding. We could reduce air pollution, traffic congestion, and road and bridge support deterioration and maintenance expenses if we diverted some of that tonnage onto HSR. I have said this to the HSRA since before its creation when it was a Commission.

I believe that reliance on tax subsidies ought to be deemed unfeasible, given the tax/fee burdens already imposed on Californians by all levels of government, not to mention the even larger burdens which our generation is imposing on future generations.

Rather, the manner in which railroads were originally created, and funded, freight revenue combined with losing passenger fares, ought to be the funding formula upon which the HSR is created and maintained.

As the LAO's Report states (page 5), the HSR service should "not require an operating subsidy." A feasible "funding source . . . for future years . . ." (page 6, LAO's Report) exists now and will exist into the future: freight revenue. As with freight moving in the bellies of airliners, HSR can transport freight, thereby decreasing air pollution because the fuel savings per ton/mile is about 75% compared with rubber tires hauling freight on concrete or asphalt. The profit made moving freight

¹Joseph P. Thompson, "ISTEA Reauthorization and the National Transportation Policy," *25 Transportation Law Journal*, pp. 87-*etseq.* (1997).

Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

11-526

can offset the losses sustained transporting passengers. Overnight shipments between Northern and Southern California can be transported without interfering with daytime, commute hours.

Comment: UP's Property Rights.

In addition to those aspects identified by Cox and Moore ("Reason Report"), the UP's Coast Main Line, which is part of its incomparable interstate railroad, and considered by many to be the best railroad in the whole world, if not in America, is entirely its own, for its shareholders' benefit. The Nation's national security and interstate commerce justify the position paramount to lesser entities, the States, and local government, which the courts have repeatedly upheld on federal preemption grounds. A look at the Maps of UP's tracks in the SF Peninsula, San Jose, and South Bay Area show that the current HSRA proposal is impossible without UP's consent. Since UP has not given its consent (Mr. Wilmoth's Letter enclosed), the proposed route is not a legally possible route, even if the HSRA could find the tax subsidy money to operate it as currently proposed.

Conclusion. I believe that Secretary Mineta was right. However, HSRA's answer is wrong for California, and impossibly burdensome for its taxpayers in this and future generations. By following our predecessors' example, and having learned from their mistakes, we can have sound, sustainable HSR in California.

Caveat Viator!"

Respectfully yours,
JOSEPH P. THOMPSON, ESQ.

11-527

JOSEPH P. THOMPSON
Attorney at Law
8339 Church Street, Gilroy, CA 95020
Telephone (408) 848-5506; Fax (408) 848-4246
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March 23, 2009

Fax: 916-322-0827
Mr. Mehdi Morshed, Exec. Dir.
High Speed Rail Authority
925 L Street, Suite 1425
P. O. BOX 942874, MS-74
Sacramento, CA 95814

Re: Public Comment HSRA's Environmental Impact Report SF-San Jose-Gilroy-Merced

Dear Mr. Morshed,

Thank you for allowing members of the public to comment on HSRA's EIR for the San Francisco-San Jose-Gilroy-Merced Segment.

Identity of Author. I am a graduate of San Jose State University, and have done post-doctoral study of transportation law and policy at the Mineta Institute at SJSU. I write only for myself, and not on behalf of a client or organization, but merely to express my personal reply to the EIR for the segment that includes Gilroy, where I have practiced law for more than 30 years.

Background. I here refer to and incorporate by reference: (1) my letter to you dated 3/10/04; (2) letter dated 2/23/09, amended 3/13/09, from Mr. J.S. Jerry Wilmoth, UPRR; (3) Map CA-13, CA-17a&b, and CA-18, *Railroad Atlas of North America, California and Nevada*, pp. 18, 22-23; and Wendell Cox & Adrian T. Moore, *The California High Speed Rail Proposal: A Due Diligence Report*, Reason Foundation, Sept. 2008; Legislative Analyst's Office, *The High-Speed Rail Authority*, March 17, 2009 (see copies enclosed).

Summary. The crucial question facing us with HSR's proposal was concisely stated by the Honorable Norman Y. Mineta: "The crucial question in transportation today is: What should government do, and what should it leave to others."¹ The sound, sustainable answer to Secretary Mineta's "crucial question" lies in the private sector, not in the public sector. With free enterprise as a foundation, high speed rail's owners and investors can combine profitable freight revenue with losing passenger fares, rather than asking the maxed-out taxpayers of California for more tax subsidies for yet another public-sector passenger mode of travel.

¹Joseph P. Thompson, "ISTEA Reauthorization and the National Transportation Policy," *25 Transportation Law Journal*, pp. 87-*etseq.* (1997).

Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

11-527

Comment: Funding Source for Operations. The current proposal does not satisfy the requirements of sound railroading, while it adheres to the tax-dependent method of finance akin to Amtrak, Caltrain and urban mass transit, with only a very small fraction of the overall expenses paid for by the patrons. The underlying assumption that taxpayers can continue to pony-up the subsidies for more government-owned transport is wrong. History shows the proposal to be fatally flawed. All of the State-owned railroads in the Nation failed in 1837-1840. Lincoln knew personally about those failures, so when General Granville Dodge recommended to the President in 1864 that the government own the transcontinental railroad, Lincoln said "no." His theory, which ultimately worked, was that private enterprise own the railroads, but that the government would aid in their construction. When the Nation's railroads were nationalized during World War I, it only took 18 months before the government's mismanagement had brought all our railroads to a screeching halt. So, Congress reversed its previous decision and de-nationalized our railroads. In 1970 during debates in Congress on formation of the National Railroad Passenger Corporation (Amtrak), some members promised that Amtrak "would be profitable in three years." Amtrak has failed to break even, and requires ever-increasing tax subsidies to continue its operations. Our Nation paid dearly for Amtrak's subsidies because on 9/11/01 we did have Amtrak, but we did not have adequate airport security.

The north-south tonnage flows in California, on Hwy. I-5, US 101, and Hwy. 99, represent a source of funding that could, in a private-sector model, duplicate and exceed taxpayers' subsidies in the public-sector model as proposed in the EIR. The French government has announced that it will have Fedex freight transported by that nation's HSR starting next year, so those with experience in operating HSR in Europe have apparently resorted to freight revenue as a source of funding. We could reduce air pollution, traffic congestion, and road and bridge support deterioration and maintenance expenses if we diverted some of that tonnage onto HSR. I have said this to the HSRA since before its creation when it was a Commission.

I believe that reliance on tax subsidies ought to be deemed unfeasible, given the tax/fee burdens already imposed on Californians by all levels of government, not to mention the even larger burdens which our generation is imposing on future generations.

Rather, the manner in which railroads were originally created, and funded, freight revenue combined with losing passenger fares, ought to be the funding formula upon which the HSR is created and maintained.

As the LAO's Report states (page 5), the HSR service should "not require an operating subsidy." A feasible "funding source . . . for future years . . ." (page 6, LAO's Report) exists now and will exist into the future: freight revenue. As with freight moving in the bellies of airliners, HSR can transport freight, thereby decreasing air pollution because the fuel savings per ton/mile is about 75% compared with rubber tires hauling freight on concrete or asphalt. The profit made moving freight can offset the losses sustained transporting passengers. Overnight shipments between Northern and Southern California can be transported without interfering with daytime, commute hours.

Comment: UP's Property Rights.

In addition to those aspects identified by Cox and Moore ("Reason Report"), the UP's Coast Main Line, which is part of its incomparable interstate railroad, and considered by many to be the best railroad in the whole world, if not in America, is entirely its own, for its shareholders' benefit. The Nation's national security and interstate commerce justify the position paramount to lesser entities, the States, and local government, which the courts have repeatedly upheld on federal preemption grounds. A look at the Maps of UP's tracks in the SF Peninsula, San Jose, and South Bay

11-527

Area show that the current HSRA proposal is impossible without UP's consent. Since UP has not given its consent (Mr. Wilmoth's Letter enclosed), the proposed route is not a legally possible route, even if the HSRA could find the tax subsidy money to operate it as currently proposed.

Conclusion. I believe that Secretary Mineta was right. However, HSRA's answer is wrong for California, and impossibly burdensome for its taxpayers in this and future generations. By following our predecessors' example, and having learned from their mistakes, we can have sound, sustainable HSR in California.

Caveat Viator!

Respectfully yours,

JOSEPH P. THOMPSON, ESQ.

Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

Fw: Public Comment: Next Regular and/or Special Study Session or Public Workshop Se... Page 1 of 4

Fw: Public Comment: Next Regular and/or Special Study Session or Public Workshop Se... Page 2 of 4

YAHOO! MAIL
Classic

Fw: Public Comment: Next Regular and/or Special Study Session or Public Workshop Session or Special City Council Meeting 1/6/12 with CAHSRA's CEO-----Fw: Available for Comment: High-Speed Rail Bay Area to Central Valley Partially Revised Draft Program EIR
Friday, January 6, 2012 10:53 AM

From: "Joseph Patrick Thompson" <translaw@pacbell.net>
To: bayarea-centralvalley@hsrc.ca.gov
Cc: senator.simitian@sen.ca.gov, "Daron McDaniel" <daron.mcdaniel@mail.house.gov>
4 Files (193KB)

Mr. Mehdi Morshed, Exec. Dir.
High Speed Rail Authority
925 L. Str. #1425
Sacramento, CA 95814

Re: Public Comment: Re-revised EIR for Bay Area-Central Valley Segment

Dear Mr. Morshed,

11-528

Thank you for again inviting public comment. This is my fourth letter to you about this ill-conceived concept. Please include this as part of the official record of the proceedings. I've not changed my position, as indeed you have not. Both HSRC and HSRA have ignored my warnings, and the warnings of others, and the lessons of history. We ignore those lessons at our peril. Caveat viator.

Sincerely,
Joseph P. Thompson
Gilroy, California

-- On Fri, 1/6/12, Joseph Patrick Thompson <translaw@pacbell.net> wrote:

From: Joseph Patrick Thompson <translaw@pacbell.net>
Subject: Public Comment: Next Regular and/or Special Study Session or Public Workshop Session or Special City Council Meeting 1/6/12 with CAHSRA's CEO-----Fw: Available for Comment: High-Speed Rail Bay Area to Central Valley Partially Revised Draft Program EIR
To: "City Council Members City of Gilroy" <AllCouncilMembers@ci.gilroy.ca.us>, "shawna freels" <shawna.freels@ci.gilroy.ca.us>, "Mike Wasserman" <askmike@garlic.com>, "Tammy Brownlow" <president@gilroyedc.org>, "pam Gilroy EDC" <admin@gilroyedc.org>, "nancy martin" <nancy.martin@edcsanbenito.org>, svalenta@gilroy.org, "christine gusiana" <cgusiana@morganhill.org>, "SBC Board of Supervisors" <sbcsuper@supervisor.co.san-benito.ca.us>, "sbcoog" <info@sanbenitocog.org>, "Margie Barrios" <mbarrios@rezzolink.com>, "Anthony Botelho" <bpfrut@garlic.com>, "jalme delaacruz" <jalmedlc2003@yahoo.com>, "Jerry Muenzer" <jerry@muenzers.com>, mpowell@gilroydispatch.com, "Marty Richmond" <mgr42@charter.net>, "Victor Gomez" <vgghollister@sbcglobal.net>, "Raymond Friend" <raymond.friend@hollister.ca.gov>, "Marshal Scatini" <robert.scatini@hollister.ca.gov>, "Douglas Emerson" <dae11dae@pacbell.net>, "Pauline

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Valdivia" <jantano@aol.com>, "Sharon Gonsalves" <Sharon.Gonsalves@asm.ca.gov>, "Daron McDaniel" <daron.mcdaniel@mail.house.gov>, senator.simitian@sen.ca.gov, "highspeedrail SF Peninsula Communities" <selyn@co-hsr.org>, "yvonne saucedo" <yvonne.ss@sbcglobal.net>, "Benito Chapter" <sanbenitochapter@yahoo.com>, editor@garlic.com, editor@gilroydispatch.com, "robert airoldi" <editor@morganhilltimes.com>, editor@freelancenews.com
Date: Friday, January 6, 2012, 10:44 AM

Honorable Members of the Gilroy City Council
Re: Next Regular and/or Special Study Session or Public Workshop Session or Special Meeting Session at City Hall 1/6/12 with CAHSRA's CEO: Public Comment Dear Honorable Council Members,

Please add this for "public comment" at your next regular and/or special study session or public workshop session or your special meeting at City Hall today with CAHSRA's CEO.

Please join with me in supporting the taxpayers of this town, this County, and this State in opposing another public-sector transport boondoggle. We cannot afford the boondoggles that you have already placed on our backs. Your joint power authorities like VTA-COG are already bleeding us dry, and on top of the back-breaking subsidies that we pay for other public sector transit boondoggles like Amtrak, Caltrain, Lite Rail, etc., etc., etc.

Your policy of tax-and-spend with our money is a failed policy that is ruining our State, and our Nation.

Please admit it when your wrong—you're wrong. Turn around, or you've got us on the same route taken by the USSR. Private-sector solutions are the only long-term, sustainable solutions, as I said to the High Speed Rail Commission in five different cities about 15 years ago when they started this plan.

Caveat viator.

Respectfully,

Joseph P. Thompson, Esq.

Past-Chair, Legislation Committee, Transportation Lawyers Assn.

Gilroy (408) 848-5506

-- On Fri, 1/6/12, California High-Speed Rail Authority <californiahighspeedrailauthority@hsrc.ca.gov> wrote:

From: California High-Speed Rail Authority <californiahighspeedrailauthority@hsrc.ca.gov>
Subject: Available for Comment: High-Speed Rail Bay Area to Central Valley Partially Revised Draft Program EIR
To: translaw@pacbell.net
Date: Friday, January 6, 2012, 9:11 AM




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Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

Fw: Public Comment: Next Regular and/or Special Study Session or Public Workshop Se... Page 3 of 4

Fw: Public Comment: Next Regular and/or Special Study Session or Public Workshop Se... Page 4 of 4



CALIFORNIA High-Speed Rail Authority

California High-Speed Rail Authority

NOW AVAILABLE:
Bay Area to Central Valley High-Speed Train Partially Revised Draft Program Environmental Impact Report

PUBLIC COMMENT PERIOD
 January 6, 2012 to February 21, 2012

PUBLIC MEETING

WHEN: February 9, 2012
 4:00 p.m. to 7:00 p.m.

WHERE: San José City Hall,
 City Council Chambers
 200 East Santa Clara St
 San José CA 95113

INFORMATION
 Visit www.cahighspeedrail.ca.gov to:

- View and download the Notice of Availability and the Partially Revised Draft Program EIR.
- Request a CD of the Partially Revised Draft Program EIR.
- Find a local library to review the Partially Revised Draft Program EIR.

The California High-Speed Rail Authority (Authority) is circulating the Bay Area to Central Valley High-Speed Train (HST) Partially Revised Draft Program Environmental Impact Report (EIR) in order to address the November 2011 Town of Atherton court rulings regarding the 2010 Bay Area to Central Valley High-Speed Train Revised Final Program Environmental Impact Report.

<http://us.mc834.mail.yahoo.com/mc/showMessage?eMid=0&fid=Sent&filterRv=&rand=70> 1/6/2012

The Bay Area to Central Valley HST Partially Revised Draft Program EIR can be obtained on the Authority's website, www.cahighspeedrail.ca.gov/ba_cv_program_elr.aspx, or by calling the Authority at (916) 324-1541 and requesting a Compact Disk (CD) copy of the document. The Partially Revised Draft Program EIR contains only the additional information and analyses needed to address court rulings.

Context for this document is contained in the 2008 Final Bay Area to Central Valley HST Program EIR/EIS and the 2010 Revised Final Program EIR, also located on the Authority's website. Pursuant to CEQA Guidelines section 15088.5, subdivision (f)(2), the Authority requests that reviewers limit the scope of their comments to the revised materials contained in this document. The Authority is obligated only to respond to those comments received during the comment period that relate to the content of this Partially Revised Draft Program EIR.

PUBLIC COMMENTS

The Authority will accept public comment on this document for a period of 45 days, commencing on January 6, 2012, and concluding at close of business on February 21, 2012.

Comments shall be directed to:

- John Mason, California High-Speed Rail Authority, 770 L Street, Suite 800, Sacramento, CA 95814.

Comments can be received by the Authority by:

- regular U.S. mail at the address above;
- via email with the subject line "Bay Area to Central Valley HST Partially Revised Draft Program EIR Comments" sent to BayArea-CentralValley@hst.ca.gov;
- or via the Contact Form on the Authority's website.

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Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

Public Comment: Next Regular and/or Special Study Session or Public Workshop Sessio... Page 1 of 4

Public Comment: Next Regular and/or Special Study Session or Public Workshop Sessio... Page 2 of 4



Public Comment: Next Regular and/or Special Study Session or Public Workshop Session or Special City Council Meeting 1/6/12 with CAHSRA's CEO-----Fw: Available for Comment: High-Speed Rail Bay Area to Central Valley Partially Revised Draft Program EIR
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 To: "City Council Members City of Gilroy" <AllCouncilMembers@ci.gilroy.ca.us>, "shawna freels" <shawna.freels@ci.gilroy.ca.us>, "Mike Wasseman" <askmike@garlic.com>, "Tammy Brownlow" <president@gilroyedc.org>, "Jim Gilroy EDC" <edcinfo@gilroyedc.org>, "nancy martin" <nancy.martin@edsanbenito.org>, "svlente@gilroy.org", "christine giustana" <clgiustana@morganhill.org>, "SBC Board of Supervisors" <sbcsuper@supervisor.co.san-benito.ca.us>, "sbccog" <info@sanbenitocog.org>, "Margarie Barrios" <mbbarrios@razzalink.com>, "Anthony Botelho" <abp@alligeric.com>, "Jaime deLacruz" <jaimedic2003@yahoo.com>, "Jerry Huotzer" <jerry@jhuotzer.com>, "mowell@gilroyedc.com", "Marty Richerson" <mr42@charter.net>, "Victor Gomez" <vghollister@dbcglobal.net>, "Raymond Friend" <raymond.friend@hollister.ca.gov>, "Marshal Scattini" <robert.scattini@hollister.ca.gov>, "Douglas Emerson" <dae11dae@pacbell.net>, "Pauline Valdivia" <parlane@aci.com>, "Sharon Goncalves" <Sharon.Goncalves@asm.ca.gov>, "Daron McDaniel" <daron.mcdaniel@mail.house.gov>, "senator.simitian@sen.ca.gov", "highspeedrail 5F Peninsula Communities" <elyna@cc-hsr.org>, "Yvonne Saucedo" <yvonne.ss@dbcglobal.net>, "Benito Chapter" <sanbenitochapter@yahoo.com>, "editor@garlic.com", "editor@gilroyedc.com", "robert aronoff" <editor@morganhilltimes.com>, "editor@freelancenews.com"

4 Files (193KB)

Honorable Members of the Gilroy City Council
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 Your policy of tax-and-spend with our money is a failed policy that is ruining our State, and our Nation.
 Please admit it when you're wrong—you're wrong. Turn around, or you've got us on the same route taken by the USSR. Private-sector solutions are the only long-term, sustainable solutions, as I said to the High Speed Rail Commission in five different cities about 15 years ago when they started this plan.
 Caveat viator.
 Respectfully,
 Joseph P. Thompson, Esq.
 Past-Chair, Legislation Committee, Transportation Lawyers Assn.
 Gilroy (408) 848-5508

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From: California High-Speed Rail Authority <californiahighspeedrailauthority@hsr.ca.gov>
 Subject: Available for Comment. High-Speed Rail Bay Area to Central Valley Partially Revised Draft Program EIR
 To: translaw@pacbell.net
 Date: Friday, January 6, 2012, 9:11 AM



**NOW AVAILABLE:
 Bay Area to Central Valley High-Speed Train
 Partially Revised Draft Program Environmental
 Impact Report**

PUBLIC COMMENT PERIOD

January 6, 2012 to February 21, 2012

PUBLIC MEETING

WHEN: February 9, 2012
 4:00 p.m. to 7:00 p.m.

WHERE: San José City Hall,
 City Council Chambers
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Submission 11 (Joseph P. Thompson, January 12, 2012) - Continued

Public Comment: Next Regular and/or Special Study Session or Public Workshop Sessio... Page 3 of 4

Public Comment: Next Regular and/or Special Study Session or Public Workshop Sessio... Page 4 of 4

INFORMATION

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PUBLIC COMMENTS

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Response to Submission 11 (Joseph P. Thompson, February 23, 2012)

11-523

The Authority disagrees with the commenter's assertion that there is no need or desire for the statewide HST project. One purpose of the 2005 Statewide Program EIR/EIS was to evaluate the consequences of meeting the state's transportation needs over the coming decades. That document identified the environmental and economic cost of proceeding with a "do nothing" alternative as well as with a "modal alternative" that would expand freeways, airports, and conventional rail systems without building a high-speed rail project. The conclusion of the 2005 Statewide Program EIR/EIS process was that the HST system was a less costly alternative and less environmentally damaging alternative overall. Furthermore, the proposed 220-mph HST system would provide lower passenger costs than travel by air for the same city-to-city markets. It would increase mobility while reducing air pollution, decreasing dependence on fossil fuels, and protecting the environment by reducing greenhouse gas emissions, and would promote sustainable development. By moving people more quickly and at less cost than today, the HST system would boost California's productivity and also enhance the economy.

11-160

Comment acknowledged. All comments submitted during the public review period, from January 6 through February 21, will be entered into the record for consideration by the Authority Board.

11-161

High-speed rail systems around the world cover their own operating costs, which is a key reason why 13 nations have built almost 10,000 miles of high-speed rail lines in the last few decades and why 24 countries are planning and building another 16,000 miles. The financial analysis of the California system, described in the 2012 Draft Business Plan, clearly demonstrates that the ridership and revenues are well able to cover the costs of operating the system, meaning that no operational subsidy would be required. Construction of the HST Project is being financed through a combination of

federal and state funds, including the ARRA, the federal High-Speed Intercity Passenger Rail Program, and California Proposition 1A's Safe, Reliable High-Speed Passenger Train Bond Act adopted by state voters in November 2008. To date, California has \$6.33 billion to invest in the development of its HST Project. The cost estimate presented in the Revised 2012 Business Plan (\$91.4 billion, page ES-14)) takes into account the latest design information, adds the cost of inflation to anticipate increased costs from that source, and includes a contingency fund. The inflation and contingency fund provisions provide a realistic view of the actual costs of construction.

Furthermore, as discussed in the 2012 Draft Business Plan, the Authority plans to bring a private operator on board to operate service following construction of the Initial Operating Section. There are currently no plans for the Authority or any other state agency to operate the HST system once it has been constructed.

11-526

This submission will be entered into the public record.

11-527

This submission will be entered into the public record. This letter was submitted to the Authority as a comment on the 2010 Draft Revised Program EIR Materials. Refer to comment letter I-364 on Pages 16-1124 through 16-1126 of the 2010 Revised Final Program EIR for the Authority's responses to this comment letter.

11-528

Comment acknowledged.

Submission 13 (Warren & Janis Watkins, January 9, 2012)

3557
01-09-12P02:41 RCVD

January 5, 2012

Governor Jerry Brown
C/O State Capitol Suite 1173
Sacramento, CA. 95814

RE: CA High-Speed Rail

13-16

Dear Governor,
Don't do it! Please do not waste valuable state resources on this project.. The public and state lawmakers admit that their uneducated support was misplaced. Times have changed.

Although we support local rail projects like the Sonoma-Marín SMART train, where the right-of-way, financing, and management is in place, we do not want any bonding for this top heavy infrastructure mistake.

As lifetime Californians who have supported you efforts to stabilize state budgets and financing, we ask you in the strongest terms to let the public have another say on this state rail mess.

Sincerely,

 Janis Watkins
Warren and Janis Watkins
Healdsburg

(copy)

Response to Submission 13 (Warren & Janis Watkins, January 27, 2012)

13-16

One purpose of the 2005 Statewide Program EIR/EIS was to evaluate the consequences of meeting the state's transportation needs over the coming decades. That document identified the environmental and economic cost of proceeding with a "do nothing" alternative as well as with a "modal alternative" that would expand freeways, airports, and conventional rail systems without building a high-speed rail project. The conclusion of the 2005 Statewide Program EIR/EIS process was that the HST system was a less costly alternative and less environmentally damaging alternative overall.

Furthermore, high-speed rail systems around the world cover their own operating costs, which is a key reason why 13 nations have built almost 10,000 miles of high-speed rail lines in the last few decades and why 24 countries are planning and building another 16,000 miles. The financial analysis of the California HST system, described in the 2012 Draft Business Plan, clearly demonstrates that the ridership and revenues are able to cover the costs of operating the system, meaning that no operational subsidy would be required. Construction of the HST Project is being financed through a combination of federal and state funds, including the ARRA, the federal High-Speed Intercity Passenger Rail Program, and California Proposition 1A's Safe, Reliable High-Speed Passenger Train Bond Act adopted by state voters in November 2008. To date, California has \$6.33 billion to invest in the development of its HST Project. The cost estimate presented in the 2012 Draft Business Plan (\$98 billion) takes into account the latest design information, adds the cost of inflation to anticipate increased costs from that source, and includes a contingency fund. The inflation and contingency fund provisions (totaling approximately \$43 billion) provide a realistic view of the actual costs of construction.

Submission 20 (Trisha Soebbing Shryock, January 30, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #20 DETAIL

Status : No Action Required
Record Date : 1/30/2012
Response Requested :
Stakeholder Type : Other
Submission Date : 1/30/2012
Submission Method : Website
First Name : Trisha
Last Name : Soebbing SHryock
Professional Title : MS
Business/Organization :
Address :
Apt./Suite No. :
City : cody
State : WY
Zip Code : 82414
Telephone : 999-999-9999
Email : Trisha.soebbing@yahoo.com
Cell Phone :
Email Subscription : San Jose - Merced
Add to Mailing List : Yes
Stakeholder Comments/Issues : San Jose hub . look for funding short fall see is Kris or Sidney is still there, they may be gone by now- they are all over the funding from the sunk boat.
EIR Comment : No

20-61

Response to Submission 20 (Trisha Soebbing Shryock, February 22, 2012)

20-51

This comment does not appear to apply to the 2012 Partially Revised Draft Program EIR.

Submission 21 (Trisha Soebbing Shryock, January 31, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #21 DETAIL

Status : No Action Required
Record Date : 1/31/2012
Response Requested :
Stakeholder Type : Other
Submission Date : 1/31/2012
Submission Method : Website
First Name : Trisha
Last Name : Soebbing Shryock
Professional Title : ms
Business/Organization :
Address :
Apt./Suite No. :
City : cody
State : WY
Zip Code : 82414
Telephone : 999-999-9999
Email : Trisha.soebbing@yahoo.com
Cell Phone :
Email Subscription : San Francisco - San Jose
Add to Mailing List : Yes
Stakeholder Comments/Issues : found original site of bridge before it was relocated to san francisco-
concrete bridge now with little water flow through it. Location is south
and west of city.
EIR Comment : No

21-59

Response to Submission 21 (Trisha Soebbing Shryock, February 22, 2012)

21-59

This comment does not appear to apply to the 2012 Partially Revised Draft Program EIR.

Submission 22 (Jim and Marilynne Mellander, February 8, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #22 DETAIL

Status : Pending
Record Date : 2/8/2012
Response Requested : No
Stakeholder Type : CA Resident
Submission Date : 2/8/2012
Submission Method : Project Email
First Name : Jim and Marilynne
Last Name : Mellander
Professional Title :
Business/Organization :
Address : 7010 Monte Verde Rd.
Apt./Suite No. :
City : El Sobrante
State : CA
Zip Code : 94803
Telephone :
Email : mellander@comcast.net
Cell Phone :
Email Subscription :
Add to Mailing List :
Stakeholder Comments/Issues : CA HSR Authority:

22-20

As per your public notice mailed to my home I am submitting my opinion on this project.

 I don't have the time or the inclination to read the Partially Revised Draft Program EIR.

 I am OPPOSED to building this project. Our State is bankrupt and doesn't need transportation such as this. Many people will lose their private property if this project is built, compensation for eminent domain is never enough to make up for the loss of a person's property.

 I personally prefer the comfort and safety of my private automobile and will continue to use this mode of transportation until such time as the authorities take this right away from me.

 Sincerely,
 Marilynne L. Mellander
 7010 Monte Verde Rd.
 El Sobrante, CA 94803

EIR Comment :

Yes

Response to Submission 22 (Jim and Marilynne Mellander, February 10, 2012)

22-20

The Authority disagrees with the assertion that the state can't afford the HST project. California's population is growing rapidly and, unless new transportation solutions are identified, traffic will only get worse and airport delays will continue to increase. The proposed 220-mph HST system would provide lower passenger costs than travel by air for the same city-to-city markets. It would increase mobility while reducing air pollution, decreasing dependence on fossil fuels, and protecting the environment by reducing greenhouse gas emissions, and would promote sustainable development. By moving people more quickly and at less cost than today, the HST system would boost California's productivity and also enhance the economy. One purpose of the 2005 Statewide Program EIR/EIS was to evaluate the consequences of meeting the state's transportation needs over the coming decades. That document identified the environmental and economic cost of proceeding with a "do nothing" alternative as well as with a "modal alternative" that would expand freeways, airports, and conventional rail systems without HST. The conclusion of the 2005 Statewide Program EIR/EIS process was that the HST system was a less costly alternative and less environmentally damaging alternative overall.

Submission 26 (Harold Perrin, February 14, 2012)

Comments of Harold Perrin, re: Partially Revised DRAFT Program Environmental Impact Report

While I do not believe that I have the ego necessary to regard myself as an "expert", I do believe that I have a reasonable knowledge of conditions existing on the Peninsula, as a result of having lived there for the better part of a decade and the Bay Area for more than 15 years, and while my family and I have for the moment relocated out of the area (due to business commitments) that knowledge provides a fair basis for these comments.

I. GENERAL

26-22

I support the Authority's conclusion that the recommended alignment from San Francisco to the Central Valley—the alignment from Transbay Terminal/3rd & King Streets via San Jose and Pacheco Pass—continues to be the appropriate choice for the initial phase of the HSR system. I believe that the Authority has adequately documented that this alignment offers the highest potential ridership at an achievable cost, with the lowest environmental impact, and which can likely be constructed and opened to service within this decade.

II. NOISE/VIBRATION EFFECTS: PENINSULA MAIN LINE

26-28

I believe that the PEIR lacks considerable data to make a reasoned judgment on the possibility of noise and vibration effects which could be attributed to moving freight service to an outer track on an expanded alignment. Specifically, the PEIR does not present any data concerning the present volume of Union Pacific's freight service, nor does it present any data concerning reasonable forecasts of future freight volumes.

The report lacks specificity when it simply states that UP's services consists of a certain number of trains per day. According to standard railroad operating rules, a "train" may consist simply of one locomotive, with or without cars. A "train" may also consist of multiple locomotives with up to one hundred cars, sometimes even more. The difference here is significant when considering noise and vibration effects. A short train is unlikely to provide a significant effect, particularly when considering that on a reconstructed Peninsula Main Line, grade crossings, and consequently train horn signals, will be eliminated. A short train also will not have the weight which would cause significant vibration, and generally would operate at a speed which would minimize the impact on any specific location.

On the other hand, a long train pulled by multiple locomotives is likely to cause considerably higher effects of both noise and vibration. It is obvious that a heavier train will require the locomotives to work harder and consequently generate more noise. A heavier train will also cause greater vibration effects and is likely to operate at a slower speed which would impact a specific location for a longer period of time.

I believe it would be wise for the Authority to seek from Union Pacific statistics concerning its present operations on the Peninsula, as well as its forecast of future traffic. In addition to providing needed

26-28

information for the present purpose, the data will also allow the Authority and its contractors to plan and construct the project in a way which best accommodates the UP, if freight service is to continue.

26-23

In general, freight traffic on the Peninsula has greatly decreased in the past two decades. Many freight spurs have been torn out or abandoned in place. There is little to indicate that there is any likelihood of this trend reversing. While the Port of San Francisco has previously expressed its desire for continued freight access, reality indicates that this is little more than "wishful thinking". Most observers have concluded that there is little to no likelihood that any significant freight business will ever return to the Port, and the Port's present facilities are a mere shadow of what they were several decades ago. Most of the Port's piers have either been demolished, converted to uses not requiring rail access, or cut off from rail access by the abandonment of certain portions of the Port's railroad facility.

With that in mind, I believe that the Authority may wish to consider something of a "nuclear option" to resolve the issues of freight train noise and vibration on the Peninsula:

In the Trackage Rights Agreement between the Peninsula Corridor Joint Powers Board and the Southern Pacific Company (UP's predecessor), the PCJPB (section 8.3, paragraph c) has the legal right to petition the Surface Transportation Board for authority to abandon freight service along its line of railroad, should the PCJPB intend to construct facilities on the property which would be incompatible with freight service. The UP, as SP's successor, is barred from opposing such a petition. There can be little argument that the CHSRA's proposed project is in many ways incompatible with freight service, and therefore the JPB has authority to exercise its option. Freight service is certainly incompatible, for example, with the Millbrae station as it is currently proposed.

It may be more cost-effective for the Authority to offer relocation assistance to the remaining freight shippers on the Peninsula than to take the extra steps to construct the project to be compatible with freight service and to mitigate the noise/vibration effects. I believe it would be wise for the Authority to insist that the PCJPB exercise their authority as a condition to receiving the funding package now being negotiated between the Authority and the PCJPB. I also believe that it would be wise to require that in return for the funding, the PCJPB will transfer title to the property to the Authority, allowing the PCJPB to become an operating agency without responsibility for infrastructure maintenance. This would also allow Caltrain to address many of its present financial woes, strengthening the existing service while laying the ground work for HSR.

I have long believed that UP's opposition to sharing Peninsula facilities with HSR has little to do with protecting UP's minimal business on the line, and is primarily an effort by UP to avoid setting a precedent with respect to UP's property in relation to other portions of the CHSRA system and potential HSR systems elsewhere. I believe that the abandonment of Peninsula freight service would have a minimal effect on UP. I also believe that it is foolish to increase the cost of the HSR project by including rebuilt freight facilities whose purpose may not even survive the construction period—in other words, the CHSRA would be constructing freight facilities for which there will never be a use. The Authority might just as well include facilities for washing out steam locomotive boilers.

Removal of freight service from the joint Caltrain/HSR right of way may also make it possible to reduce the effects on paralleling streets along the Peninsula (section 3), as it may be possible to design the most constricted points with brief stretches of three-track, rather than four-track alignment.

Submission 26 (Harold Perrin, February 14, 2012) - Continued

26-24

III. TRAFFIC IMPACTS ON THE PENINSULA:

As stated above, I believe that elimination of the necessity of providing freight facilities on the Peninsula line may reduce or eliminate the need for some or all of the reduction in traffic lanes alongside the project ROW. With or without freight service, thoughtful and creative design efforts may achieve the same result.

In any event, I do not believe that these impacts are sufficient to require that the Authority choose the "no build" option, nor do I believe that the Authority should bear the entire burden of mitigating such adverse effects as may remain. Many of these constricted points are the result of poor judgments made by local governments in past decades, when they allowed development to encroach too closely to the railroad facilities. That being the case, I believe that the municipalities must share with the Authority the burden of correcting those errors.

26-25

IV. "PHASED IMPLEMENTATION"

I wish to oppose in the strongest possible terms, any portion of a "phased implementation" approach which creates a temporary northern HSR terminal at San Jose or any location other than the new Transbay Terminal or the current Caltrain terminal at 3rd and King Streets in San Francisco.

It is clear that the entire rationalization for the phased approach is to appease a very, very small minority of arrogant individuals on the Peninsula, who believe that their relative affluence enables them to override the expressed wishes of the people of the entire Peninsula and state. With that in mind, I believe that any effort to create a temporary northern terminal, with the consequent increased traffic in areas surrounding that terminal, would place the HSR project in grave danger of violating Title VI of the federal Civil Rights Act. The Authority may not shift the perceived burdens of the HSR project from an affluent area with a mostly majority ethnic background, to a less-affluent, largely minority area without running afoul of Title VI, nor may it shift the burden to Caltrain and its passengers, particularly when it is clear that the shift is being made for political reasons. It is also clear that the increased congestion and air quality effects created at a temporary San Jose terminal would be far greater than the minimal perceived effects on the residents of Palo Alto, Menlo Park and Atherton, and their backyard barbecues. By terminating trains short of the ultimate San Francisco terminal, the "phased" approach would also increase the cost of the project by requiring a temporary yard/shop facility in the San Jose area which may or may not be usable once operations to San Francisco begin.

26-26

I would also oppose any phased plan which would not complete as much of the civil construction as possible in the initial construction phase. That is, whether it is the Authority's "phased" approach or the Authority-funded Caltrain improvements, the initial construction must ensure that all bridges, overhead structures, culverts, embankments, and station properties are built to accommodate the future four-track system. The only items omitted from a "phased" initial stage should be the third and fourth tracks and associated electrification equipment. The Authority will never be able to construct these facilities at a lower cost than is possible in today's economic climate, will never be able to acquire the needed property at a lower cost, and runs the risk of having to deconstruct and reconstruct work from the initial phase if it is not constructed to allow the easy placement of the third and fourth tracks. I would therefore oppose any funding agreement with the JPB which allows the Board to use any Proposition 1A funding in a manner inconsistent with building the ultimate 4-track HSR facility.

26-27

Finally, I believe that any plan which would create a terminal short of Transbay Terminal and/or 3rd & King is not in keeping with either the letter or spirit of Proposition 1A, which in essence requires that service be initiated to San Francisco at the earliest possible time. It is my opinion that while the entire project obviously cannot be constructed all at once, nothing in Prop 1A permits the Authority to adopt the "phased" approach as outlined in section 5 of the PEIR.

I strongly disagree with the Authority's conclusion that the phased approach does not change the HSR program as described in the various EIR documents. The program is proposed as a San Francisco-Los Angeles/Anaheim system, not a San Jose-LA/Anaheim system with a San Francisco connection to be built at an indeterminate future date. I believe that the original documents, as well as Prop 1A, commit the Authority to construction of the San Francisco Peninsula segment at the earliest possible time.

I also recognize that this entire "phased" approach may become moot with the Authority's current negotiations with the PCJPB for Caltrain improvements, which as I have previously stated, in my view must be compatible with the ultimate HSR plan if they are to be built with Prop 1A funding.

Response to Submission 26 (Harold Perrin, February 17, 2012)

26-22

Comment in support of Authority's previous selection of the preferred alternative is acknowledged. The Board will consider this Partially Revised Program EIR along with the whole of the record before it, including public comments, in determining whether to again select the Pacheco Pass Network Alternative serving San Francisco via San Jose as the preferred alternative.

26-28

Chapter 2 of the Partially Revised Draft Program EIR specifically addresses potential noise and vibration impacts related to moving freight closer to existing noise sensitive land uses. As indicated Chapter 2 and in the Noise and Vibration Technical Memorandum (6 January 2012) prepared as part of this analysis, the amount of freight traffic on the corridor is very small in comparison to the number of passenger trains per day. The exact number and timing of freight trains in the corridor varies, and is based on a Trackage Rights Agreement. This excerpt from the Noise and Vibration Technical Memorandum explains the Agreement:

The rail corridor on the peninsula is owned by the Caltrain provider, the Peninsula Corridor Joint Powers Board (JPB), who manages train scheduling and determines on which track different trains operate. Freight service is allowed in the corridor when there is a window between passenger trains of at least 30 minutes headway. The Trackage Rights Agreement between the JPB and Southern Pacific Transportation Company (executed in November 1991) specifies that the JPB will make at least one of these windows available between 10:00 am and 3:00 pm each day in both northbound and southbound directions. Between midnight and 5 a.m., at least one main track of the Peninsula Main Line is available for freight with an adequate number of thirty (30) minute headway windows. Although this agreement does not explicitly limit the number of freight trains allowed per day in the corridor, in practice, an average of about four freight trains travel in the corridor between Santa Clara Junction and San Francisco in each 24-hour period.

These four freight trains per day represent less than 5 percent of the trains daily in the corridor, with the remainder being passenger trains. The noise evaluations in the 2008 and 2010 Programmatic EIRs are based on the assessment that the corridor is primarily used for passenger rail and, therefore, that the majority of the train noise is passenger-train related.

The Trackage Rights Agreement does not limit or specify maximum weight or size of freight trains. For the analysis in Chapter 2 of the PRDEIR, the conservative assumption was used that all trains (now and in the future) in the corridor average 2 locomotives and 40 freight cars travelling at 50 mph. This assumption was then used in the analysis to determine the amount of change in noise and vibration to be expected from freight trains being moved closer to sensitive receptors. As documented in Chapter 2, over a 24-hour period the change in the noise and vibration levels associated with just freight activity would be imperceptible.

26-23

While the Authority acknowledges the historical decrease in the amount of freight traffic along the Caltrain Corridor, it would be speculative to assume that such freight service would cease to exist in the horizon within which the HST system would be constructed. The existing condition along the corridor, with a mix of Caltrain passenger rail traffic and freight traffic, is the current environmental setting.

Any future land-use decision on behalf of the Peninsula Corridor Joint Powers Board (PCJPB) and Authority, including a transfer of ownership and maintenance between the agencies and/or elimination of freight service in the corridor, is similarly speculative and outside of the scope of this Program EIR.

If a second-tier San Francisco to San Jose section environmental document is restarted, any new agreements or decisions with respect to a change in the freight service in the Caltrain Corridor will

be considered as part of the environmental setting of that project-level document.

26-24

The commenter suggests that the elimination of freight service on the Caltrain Corridor may eliminate the need for potential traffic lane reductions and that thoughtful and creative design may achieve the same result. At this time there are no plans to eliminate freight service on the corridor. Freight movements during times when Caltrain or HST are not in operation are necessary to support existing businesses along the Peninsula Corridor. The commenter is correct in the statement that thoughtful and creative design may eliminate the need for lane reductions. The second-tier Alternatives Analysis for the San Francisco to San Jose section which identified the potential lane closures was based on very preliminary design. If design advances, it is expected that most, if not all, of the lane closures will be eliminated through adjustments in vertical alignments, lane width reductions, realignment of the roadway segment, and reduction of on-street parking which are examples of the thoughtful and creative design suggested in the comment.

The existing condition along the corridor whereby roadways and urban development are adjacent to the railroad corridor is the current environmental setting. The commenter feels that poor judgment was used in creating the current environmental setting. However, this is the context within which the project must be evaluated. Any impacts on the current environmental setting, regardless of the judgment used to create this setting, will be mitigated solely by the HST project.

26-25

The commenter's opposition to the phased implementation approach is acknowledged. As noted by the commenter, unique impacts would occur at an interim northern terminus station with a phased approach as presented in the 2012 Draft Business Plan. These impacts, including the potential for higher traffic congestion and impacts on connecting commuter rail systems are newly identified significant impacts.

With respect to the program-level decision on a preferred alternative, these differences do not distinguish between the Altamont and Pacheco network alternatives. Phasing can be accomplished for both network alternatives. The unique impacts that would result from the phased approach are discussed and presented in Chapter 5 of the 2012 Partially Revised Draft Program EIR. Specific impacts related to a longer-duration implementation of the statewide system due to the phased approach would be evaluated in each project-level EIR/EIS.

26-26

Comment acknowledged. The 2012 Draft Business Plan suggests that there may be a period when the HST system would extend from San Jose to the San Fernando Valley or a "Bay to Basin" step of the overall statewide system development. This step would allow passengers coming to the Bay Area to transfer at San Jose Diridon Station to Caltrain in order to complete their trip within the Bay Area. However, the intent is that this "Bay to Basin" phase would be temporary and that a few years later, high speed trains would be able to continue their trips through San Jose and up the Peninsula on "Blended System" where Caltrain and HST equipment would share an electrified Caltrain system to complete a "one-seat-ride" to San Francisco from the Central Valley or Southern California.

To that end, it is the Authority's intent to maximize the utility of any investments in the phased implementation approach or blended system approach on the Peninsula (also refer to Standard Response 1). The Authority in partnership with Caltrain and corridor stakeholders is working through a planning process to define what the blended system should look like. This analysis will also examine the construction phasing of the project in order to minimize possible "re-work" on the corridor as a result of anticipated future system expansion (e.g. adding passing tracks in key locations to accommodate additional Caltrain or HST service).

26-27

The Authority disagrees that the phased implementation approach is not consistent with either the letter or spirit of Proposition 1A. The 2012 Draft Business Plan, including the preliminary phased

implementation approach it presented, is consistent with requirements in Proposition 1A. Proposition 1A ensures that complementary rail capital improvements would be funded by a \$950 million portion of bond funds. These funds must be allocated to intercity, commuter and urban rail systems and shall provide direct connectivity and benefits to the HST system and its facilities or be part of the construction of the system. The phased implementation approach would be considered a complementary rail capital improvement project.

Furthermore, as discussed in the Response to Comment 26-26, it is the Authority's intent to maximize the utility of any funds that might be dedicated towards construction of improvements related to the phased implementation approach, and to ensure that such improvements would be able to be used in the full build-out of the HST system to the maximum extent feasible.

Please refer to Standard Response 1 on the Business Plan and the blended system, which address the issues raised in this letter.

Submission 29 (Michael J. Brady, February 15, 2012)

Michael J. Brady, Esq.
191 Forest Lane
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mbrady@rmkb.com
650-780-1724

February 14, 2012

3917
02-15-12 09:05:05 RCVD

29-32

Legally, you are required to explain your position. Why are you no longer supporting the blended system? Why are you adhering to the four track system? Please address these issues. And don't tell us that we will have the blended system "for a while," and then have the four track HSR system thrust upon us. I'm afraid that little ploy will not work.

Very truly yours,
Michael J. Brady
Michael J. Brady, Esq.

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Attn: Bay Area to Central Valley HST Partially Revised Program EIR Comment

Dear CHSRA Board:

This is a comment on your EIR released January 6, 2012. I believe the deadline is February 21, 2012.

This document indicates your intention to adhere to a four track (four sets of tracks) on the peninsula corridor. You give no explanation whatsoever for the fact that for many months cities, towns, the County, and residents up and down the peninsula have been told by Cal Train (with whom you work) that the "blended system" was in the works. That, of course, involves two sets of tracks, no intrusions on neighboring property, no increase in the width of the ROW, and would be "at grade", with few elevated grade separations. In fact, on February 6, I attended a "Friends of Cal Train" meeting in which Cal Train (Marian and Seamus) enthusiastically announced that they were rapidly moving ahead with all the elements of the blended system and were working with you.

How can this be? The four track system was the system universally condemned by the peninsula and its residents more than a year ago. It would destroy our beautiful town centers and neighborhoods. So much for outreach, dialog, etc.

Your EIR is fatally defective for not explaining your abandonment of the blended system; we will actively encourage those politicians who backed the blended system (Simitjan, Eshoo, and Gordon) to abandon you as well.

29-32

RC1/6329083.1/CM3

RC1/6329083.1/CM3

Response to Submission 29 (Michael J. Brady, February 17, 2012)

29-32

The comments on the blended system are acknowledged. Please refer to Standard Response 1 on the Business Plan and the blended system, which address the issues raised in this letter.

Submission 32 (William Warren, February 17, 2012)

3926
02-17-2012 11:12 AM

February 16, 2012

Mr. John Mason
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Attention: Bay Area to Central Valley HST Partially Revised DRAFT Program EIR Comment

Dear Mr. Mason,

I am submitting this letter as my comment on the "Bay Area to Central Valley High Speed Train Partially Revised DRAFT Program Environmental Impact Report", dated January, 2012. This Report is referred to as the "EIR", below.

32-230

The EIR states that the preferred alternative for most of the distance between San Jose and San Francisco is a 4 track solution to accommodate HSR and Caltrain. This is presented as a 4 track elevated viaduct in the Draft 2012 Business Plan. It appears that the driving need for the 4 track solution is based on the projected HSR passenger demand in the 2030's and 2040's. If this projected demand was less, it might be possible to recognize that the Blended Solution, also discussed in the Draft Business Plan, of a two track, non elevated (at grade) system, might be adequate between San Jose and San Francisco as the long term solution.

The implications of the difference between the Blended Solution and the 4 track elevated solution, are very high from a financial point of view and they are very high in terms of the environmental impact on the San Francisco Peninsula. The EIR clearly states that there will be significant environmental impacts that will occur due to the 4 track design. Clearly they will be more significant if the 4 tracks are elevated. The EIR is also silent on the impacts of the 2 track, at grade, Blended Solution. In order to do an adequate environmental review under CEQA, you must analyze a reasonable range of alternatives. An alternative that incorporates the minimum standards articulated by Senator Simitian, Assembly Member Gordon, and Congress Member Eshoo is absolutely such an alternative. Those minimum standards include: maintaining new service within the existing Caltrain Right of Way (with minor exceptions) and no elevated structures unless specifically requested by the local government agency with land use authority where such a structure would be constructed.

32-231

Please revise this current draft of the EIR, taking account of this alternative, and recirculate it for further public comment.

32-232

It is also very clear that in all of the calculations associated with the ridership forecasts for the Draft 2012 Business Plan, where system level forecasts are presented, that while San Diego and Sacramento are included in the long term forecast, as terminating points for future HSR corridors, these is no mention of an Oakland station.

It is clearly evident that Oakland is specifically excluded to maximize the ridership forecast to San Francisco, because it is projected that many, or maybe all, passengers from, and to, the East Bay will travel to San Francisco to board the HSR. In fact in a response to a comment I submitted to the 2010 version of the EIR, your Response I164-1 stated that the ridership forecast for San Francisco would drop by 53% if there was a HSR station in Oakland.

32-232

The consequence of this tactic to enhance San Francisco ridership, by purposefully not including Oakland as a terminating point, appears to be a key driver in the need for a 4 track solution, which has now become a 4 track viaduct solution, with significant environmental consequences on the Peninsula. The EIR states that the impacts of a 4 track solution are "significant but unavoidable". See EIR Table 1-1. I believe that statement is totally false, as the mitigating implications of an Oakland station with a connection to San Jose have been intentionally ignored.

It is clear that no careful analysis of looking at the alternative (to the planned 4 track viaduct solution) of a 2 track solution on the Peninsula from San Jose to San Francisco, and a subsequent 2 track solution in the East Bay from San Jose to Oakland, has been completed. Page 6-13 of the EIR states that the costs of the San Jose to Oakland segment would be about \$3.6 Billion in 2006 dollars, but a comparison to the reduction in costs on the Peninsula has not been made, nor is the reduction on the environmental impact on the Peninsula discussed.

Clearly the trade-off is 1) a dramatic reduction in the environmental damage to be done on the Peninsula, as clearly noted in the EIR, along with some reduction in cost, by scaling back to a 2 track solution, and 2) the increase in cost of an additional 2 track HSR line running from San Jose to Oakland.

32-234

Without such an analysis that is public and open to review, this EIR is inadequate and should not be certified. As this analysis may add an addition route (San Jose to Oakland), and may dramatically reduce the environmental impact on another route, I believe it is essential that this work be included in this Program Level EIR. Waiting for the Project Level EIR will be too late, as route changes /additions and track requirements will have been determined.

32-235

Lastly, it also appears that the concept of running UPRR freight on the two outside tracks of the 4 track elevated viaduct, for much of the distance from San Jose to San Francisco, will require ramps from the elevated track to ground level for access to the sidings that service the business on the Peninsula. The length of these ramps and their potential locations appear, to me, to be non-trivial issues, so the environmental and cost ramifications of these ramps also need to be discussed.

32-236

Again, I urge you to redo this current draft EIR to respond to these comments, and then to recirculate that revised draft, as CEQA requires.

Yours truly,

William H. Warren
2909 Waverley Street
Palo Alto, CA 94306

Response to Submission 32 (William Warren, February 23, 2012)

32-230

Please refer to Standard Response 1 regarding the blended system concept. The Draft 2012 Business Plan does not identify an alignment on the Peninsula as a four track elevated viaduct running from San Jose to San Francisco.

32-231

The Authority disagrees that revision of the Program EIR and further recirculation is required. Details about a potential second-tier project do not trigger recirculation of the first-tier EIR.

32-232

The reason that the 2012 Business Plan focuses on the San Francisco to Los Angeles and not a connection to Oakland via San Jose is because a connection to Oakland is not part of the Phase I system described in Proposition 1A. While a connection to Oakland via San Jose is a viable corridor identified in Proposition 1A, the first priority of Proposition 1A is creating a system between San Francisco and Los Angeles.

Network alternatives with an Oakland station were studied as part of the Bay Area to Central valley environmental document and found to be a viable network alternative with good ridership demand. The Authority will be evaluating a "Blended System" between San Francisco and San Jose (refer to Standard Response 1 regarding the blended system concept), which should be similar with the two-track system that the commenter is suggesting. Connecting San Francisco and San Jose via a blended system will be the Authority's first priority evaluation. A HST connection to Oakland would most likely be evaluated only after the initiation of service on the Caltrain Corridor.

32-234

The Authority does not agree that further revision and recirculation of the first-tier, Program EIR is necessary to address the blended

system approach in the Business Plan. Please refer to Standard Response 1 regarding the blended system concept.

32-235

The project design has not been sufficiently developed to demonstrate how connections with siding tracks would be maintained, but it is anticipated based on preliminary design that the infrastructure to maintain freight service in the San Francisco to San Jose Corridor can be accommodated within the project alignment studied in the 2008, 2010, and 2012 programmatic EIRs.

32-236

The Authority disagrees that revision of the Program EIR and further recirculation is required. Details about a potential second-tier project do not trigger recirculation of the first-tier EIR.

Submission 33 (Martin Mazner, February 20, 2012)

Martin Mazner
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February 18, 2012

Mr. John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Attn: Bay Area to Central Valley HST Partially Revised Program EIR Comment

Bay Area to Central Valley HST Partially Revised Program EIR Commentary:

33-499

Among other major issues, my primary concern is the 4-track alignment from San Jose to San Francisco area. A 4-track alignment will destroy the heavily developed Peninsula area.

Elected officials attempted to remove the most damaging effects of 4 track alignment by demanding the elimination of elevated tracks, staying primarily within the current footprint of the Caltrain ROW and the reduction of the full scope of the EIR as it is today which includes the eventual build out of four tracks. This was a starting point, and the fact those terms were not even part of the revised scope of the EIR is not acceptable. They are mentioned both in the business plan and this EIR but primarily in the context of phasing, which is not the same thing.

Specifically, the idea of phasing to a four track system has not been promoted by the elected officials as evidenced by Senator Simitian April 28, 2011 in fact just the opposite. In a Senate Budget sub-committee meeting, Senator Simitian asked Mr. van Ark and his counsel, "Does CEQA require you to do an EIR for a project you do not propose to build?" He then says he thinks the answer will be no. Then offers the reason for this question: "he does not want to see an EIR done that "acts as sword over the head of every property owner up and down this very developed 50 mile stretch of the corridor." See the full you-tube 30 minutes on the Senator and CEO Van Ark's exchange about the blended system. http://www.youtube.com/watch?v=6x_OtZBoby

33-499

A certified Program EIR with a four track option, by the way with even the option of an aerial structure will do exactly what Senator Simitian cautioned against, putting a sword over the head of every property owner along the corridor. Unlike some of the other cities far north and closer to the City of San Francisco, the Caltrain Corridor is heavily populated. To have more than one build out in a commercial, vacated or blighted area is one thing, to suggest more than one building period in a populous area is quite another.

33-501

If the project never moves forward you have permanently damaged the property values of homeowners and businesses along the route and hampered their ability to sell their property at what, before the announcement of the rail project, was significant values. The losses thereby will be significant if liquidation is necessary due to relocation of a job, retirement or estate liquidation.

The current business plan outlines that high-speed rail will not reach the Transbay Terminal until after 2034 and that's if all the money falls in place, which is highly unlikely. And if the dollars do not materialize, the EIR will in time be considered "stale and invalid by the courts, so why other than a placeholder, complete this EIR with a large scope project whose project description damages the communities whether or not it moves forward?

33-502

I want to see the Attorney General's opinion on the Blended system as proposed by Simitian, Eshoo and Gordon (SEG) and if the AG's office is in agreement that those minimum standards are acceptable and could be in compliance with 1A and CEQA.

The blended system has consequences as well. As currently proposed with high speed rail running 2 to 4 trains per hour with Caltrain's six, on a non-grade separated at grade track, the result could be severe traffic disruption in the cities the rail crosses. This assumes an at-grade solution which will host 170 plus trains per day, a veritable race track for trains. This system should be built in its entirety underground, where it belongs as a subway system should, not in heavily populated residential areas.

33-503

There are many aspects of this project that are not in compliance with the law. These examples apply to any area being developed to high-speed rail. One is the starting section (ICS) in the Central Valley is not legally compliant with Prop 1A. You are required to build a "high-speed rail usable segment or high-speed rail ready corridor and show that you have the funds to do so. \$25 to 30 billion are needed we have \$6 billion in matched funds. What the Authority proposes is a construction site with tracks only, even with electrification, does not meet the definition of High-Speed Rail ready. The Authority does not have the funds to legally start the first section outlined in AB 3034. But the Authority claims, they are "on the path" to compliance with the Initial Operating Segment. (IOS) which will be determined later.

Submission 33 (Martin Mazner, February 20, 2012) - Continued

33-503

The public has been told that the certain methods and projects are forbidden and now they are ok for the Authority because the project is being done in phases and they are "on the path to compliance."

Examples: Our cities were told that stopping in San Jose was illegal. Then Authority members Quentin Kopp and Rod Diridon said in public many times that stopping in San Jose was forbidden in 1A. Now in what is being proposed a faster start for Northern California, passengers will terminate at Diridon station and transfer to Caltrain for some temporary time in the future. "On the path to compliance?"

In the April 2011 Senate Budget Subcommittee meeting, CEO Van Ark, told Senator Simitian what Simitian requested for the peninsula as a first phase was not 1A compliant. He was worried about making the trip from San Jose to San Francisco in 30 minutes, in fact in the letter to the Attorney General in September 2011; he states it will be 32 minutes.

In addition the high-speed rail tracks will not be grade separated in the first phase and there must be passing tracks since high-speed trains must have a way to pass commuter rail. Van Ark also said the high-speed train cannot operate on the existing tracks; they have to be re-built and straightened out. He insisted that the full build out was part of the CEQA description and there would be more than one phase, unclear how many. It also solidifies the at-grade, the cheapest design option since there well may never be another phase.

I want another Program level EIR developed removing requirements that are in violation of the SEG minimum standards that are present in the document so the Authority does not claim, "over-riding considerations," later and go with the 4 track option even if it is not necessary in the Attorney General's eyes. It must be out of the document so this cannot be done. The idea that the smaller scope project could be developed in the Project level EIR is risky for everyone that has worked with the Authority previously. The board before this current board could not be trusted and from the demonstration of the Draft Business Plan this board cannot be trusted either. There is no accounting for what future boards will decide. Some level of insurance is not to have a Program EIR with the larger scope program certified.

33-504

Speaking of trust, Mr. Van Ark does not ask if the project scope can be reduced he asks instead this in his September 9, 2011 letter Deputy Attorney General Amy Winn, "Is there a time limit to achieving full compliance to the conditions of Proposition 1A in the construction of a state-wide system? Then he perhaps hints to the Deputy Attorney General " don't tell us now" as he says, "recognizing that you cannot give a definitive or precise answer to the question at this point in time, can you provide guidance on the likely length of time that would be required to complete environmental review under the

33-504

California Environmental Quality Act for the proposed system which contemplates a significant increase in train traffic?

Any early start for this corridor will be vehemently protested by more lawsuits, now in the preparation stages. There is no certified EIR by either the Authority or more importantly Caltrain for the blended program that the Authority is promoting but not supported in this latest Program EIR. The funding of 3034 states you must have the money to complete a usable segment or a corridor and it must be high-speed rail ready. The law also has an order of affordability, starting with the least expensive first, moving forward. The peninsula is the most expensive segment so it's hard to imagine any start in the Bay area.

Using 1A money for the improvement to regional transit is not legal. While improvements are no doubt needed, 1A money was exclusively for the use of high-speed rail, not regional transportation.

Do we need to step back and develop a state-wide plan for transportation which could include high-speed rail after appropriate changes are made to regional transportation? Yes. To build high-speed rail first when the connection points for high-speed rail are not there is foolish but don't attempt to build them with the \$9 billion in voter approved which is exclusively for the use of high-speed trains. Use the \$995 million exclusively dedicated to connectivity, but not the \$9 billion. The spending of the bond money will still overburden the state no matter what it is spent on. Perhaps if given a chance to prioritize spending, the public would spend it on education or water projects and not transportation at this time. Using the bond money for non-high-speed rail projects is not what was intended. The ends do not justify the means.

The Authority might argue that using 1A money for these connection points, under the guise of being on "the path to compliance for high-speed rail" works. It might fly if there was a credible expectation that the money to build the system would be forthcoming. But there is no credible source of capital forthcoming, there is no credible source of money on the horizon to fund a \$200 billion project for phase one. Why so high? Because in the State Auditor's report issued in January 2012, there is a huge gap in unreported operating costs- to be exact, \$97 billion dollars found the business plan by the Auditor. <http://www.bsa.ca.gov/pdfs/factsheets/2011-504.pdf> So in fact the actual numbers for the project could exceed \$200 billion without building phase 2 may in fact bring overall system project costs to over \$300 billion, compared with numbers originally presented to the public with in 1A, around \$42 billion with inflation factors build in. As one newspaper reported would Oakland, Sacramento and San Diego ever have voted for high-speed rail if they realized they would never see the train?

Submission 33 (Martin Mazner, February 20, 2012) - Continued

33-505

But back to this revised EIR, many of the traffic and noise impact for the peninsula in this document lists impacts as "unavoidable and significant," would not be either if an underground alternative was selected. Is the categorization of these impacts, "unavoidable and significant," an at grade solution? A predetermining of design alternatives before the CEQA process has been completed is not permitted. Caltrain said in their meeting in San Mateo on February 17, 2012 that the route would be on two tracks and at grade. Let me remind you that CEQA does not insist that an alternative be dismissed because of cost alone.

CEQA says: (Public Resources Code Section 21002.1), "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Removing options such as the covered trench option in Menlo Park and Palo Alto should not be permitted at this time by defining the project as at grade. Surely the project doesn't suggest that they would re-construct the line underground after investing billions in an "at grade" design.

The idea that Caltrain and freight tracks might move closer to the communities, has major impacts to residences nearby the tracks. Does that mean that the residents can never open their windows again? Certainly there would be damage to residences that will be shook more severely with the weight of freight trains passing at closer range. There is nothing that addresses the sound of the horns to the communities, even louder if they are closer and this makes the quality of life to those who live even more than mile, significantly damaged. There is much said about the need for these horns because of deaths on the tracks, some of which are documented suicides. What about the health and well-being of the people who listen to the shrill and blast of horns, gotten more severe over the years on a daily basis?

33-506

Because of so many changes to the cost and the length of time it will take to finish the route, a revisit of both the blended Peninsula system and cost analysis and blended system for Altamont's route should be done. Adding independently verified ridership numbers would also offer true apples to apples comparison. There is time to do it right, there is no official start date of September 30, 2012.

Some people including Senators Simitian and Lowenthal support a pause in the project. Let's regroup and look at the problems. Perhaps a bonafide ridership model could be developed in the next 12-18 months. There were a few minor modifications done to the model that was developed in 2007 and it's basically the same old model.

33-506

Certainly a \$13.5 billion dollar estimate for this corridor which by the way does not have complete cost deserves a more critical and objective eye. For instance this corridor does not include proper eminent domain cost numbers and never has it truly analyzed other alternatives and the net cost of doing each. Where are honest numbers for our corridor? Where are honest numbers for Altamont?

33-507

Just to make it perfectly clear, I do not support the Joint Powers Board giving or selling to the High-Speed Rail Authority any real estate interest for the Caltrain Corridor. The land for this ROW was purchased by the people of this county and other counties. The board members of the JPB are supposed to be good stewards in the management of this corridor and not supposed to trade off its use in exchange for electrification or other benefits to keep Caltrain viable. The facts aren't in on Caltrain. Where are the ridership projections that will show full trains with 170 trains a day going down the peninsula? - Six for Caltrain and two to four trains per hour for high-speed rail, racing down the corridor during the commute hours. Trading rights of this valuable peninsula right of way for the money for electrification of the corridor indeed is a cheap price to pay yet a heavy price to pay by the residents of the counties, through which this proposed train will travel.

33-508

The Authority has also refused to re-examine the ridership numbers honestly and openly and have come under fire by many independent groups such as UC Berkeley, ITS, the state Auditor, the LAO's office and the Independent Peer Review group. You must recognize that your numbers are highly under suspicious. To echo the Auditor's words, the ridership review panel is a "hand-picked group of individuals." And to know that two members reviewed the original Cambridge model in earlier years is a major problem for the objectivity of the work of this panel. Criticizing the plan, would in fact be criticizing their own work. There is also a credible suspicion that at least one member of the ridership panel received consulting work from Cambridge Systematics which should have been disclosed and possibly grounds for ineligibility for the panel.

It is my opinion that ridership issue must be addressed before the Bay Area to Central Valley Program EIR is certified. The legality of the blended plan must be addressed before the EIR is certified and permission must be granted by Union Pacific which is one year overdue per the State Auditor's report before this Program EIR is certified that damages communities up and down this corridor.

I demand appropriate action in answer to my comments.

Martin Mazner

Response to Submission 33 (Martin Mazner, March 9, 2012)

33-499

Please refer to Standard Response 1 and Chapter 5 regarding the blended system approach.

As described in Section 2.5.1A of the 2008 Final Program EIR, one HST alignment alternative, the Caltrain Alignment (Shared-Use Four-Track), was evaluated for the San Francisco to San Jose Corridor at the program-level. Full build-out of this alignment alternative assumes that the HST system would share tracks with the Caltrain commuter trains, and that two other lines would provide freight service.

The blended system concept discussed in Section 5.1.3 of the Partially Revised Program EIR was first presented in the 2012 Draft Business Plan, and is highly conceptual at this stage. If this approach were implemented in the Caltrain Corridor between San Francisco and San Jose, it would result in the HST system sharing tracks with the existing Caltrain commuter service until the full build-out of the HST system, at which time the HST system would share two tracks with the Caltrain commuter trains, and the two other lines would provide freight service as discussed in the 2008 Final Program EIR. The blended system concept discussed in the 2012 Draft Business Plan is a version of the phasing approach, and would not result in a two-track full build-out scenario as the comment suggests.

The Partially Revised Draft Program EIR was prepared to fulfill the Authority's obligation under CEQA and to address November 2011 court rulings in the *Town of Atherton litigation challenging the 2010 Bay Area to Central Valley High-Speed Train (HST) Revised Final Program EIR*. This comment is important for the public discourse on the merits of the HST Project and whether it is viewed as an asset to the state. However, this comment does not address the adequacy of the EIR analysis or the Authority's compliance with CEQA. Refer to Standard Response 1 for more information regarding the blended system and phased implementation.

33-501

Refer to Standard Response 1 regarding the 2012 Business Plan. Also refer to Standard Response 6 in the 2010 Revised Final Program EIR regarding effects of the project on property values. The purpose of the Partially Revised Draft and Final Program EIR is to provide the environmental analysis to support a determination of the appropriate network alternative to link the San Francisco Bay Area with the Central Valley. As such, the analysis examines what can be considered a worst-case analysis over a very long time horizon. Maintaining this analysis in the program EIR does not constrain the Authority's ability to focus any second-tier analysis it may proceed with for San Francisco to San Jose on a more limited, blended system approach.

33-502

Refer to Standard Response 1 regarding the blended system concept and phased implementation. Also see Chapter 5 of the Partially Revised Final Program EIR regarding potential environmental impacts of phased implementation and a sample blended system approach. The comment appears to suggest that the blended system would involve no grade separations. A blended system for the Caltrain Corridor has not been defined at this time, but may include key grade separations. Vertical profile variations will continue to be considered for any second-tier project that is part of the selected network alternative.

33-503

This comment addresses several legal issues under Proposition 1A that are not comments on the Partially Revised Draft Program EIR analysis. Refer to Response to Comment 31-31 regarding the IOS. Please also refer to Standard Response 1 regarding the blended system approach and why it is fully consistent with CEQA to maintain the current project description this Partially Revised Final Program EIR. Maintaining the analysis of a four track system in the program

EIR does not constrain the Authority's ability to focus any second-tier analysis it may proceed with for San Francisco to San Jose on a more limited, blended system approach.

33-504

The commenter is correct in pointing out that the Authority is seeking a clarification from the Attorney General on the use of Proposition 1A funds for construction of "blended systems" throughout the statewide high-speed train system (refer to Standard Response 1 for more information about blended systems). At the time of writing this response, the Authority has not received a response to their September 9th, 2011 letter regarding the "blended system" from the Attorney General.

However, the commenter is incorrect in stating that the use of portions of the \$950 million for improvements to regional transit is illegal. These funds are available to transit agencies such as Caltrain, VTA, and BART with the requirement that these improvements shall provide direct connectivity and benefits to the high-speed train system and its facilities or be part of the construction of the system. Furthermore, as discussed in the Response to Comment 26-26, it is the Authority's intent to maximize the utility of any funds that might be dedicated towards construction of improvements related to the phased implementation approach, and to ensure that such improvements would be able to be used in the full build-out of the HST system to the maximum extent feasible.

33-505

As the comment notes, some vertical alignments may reduce or increase potential impacts that would be associated with vertical alignments. The project-level analysis will take into account the vertical alignment characteristics, however this project-level analysis is presently on hold for the section from San Francisco to San Jose. Future project-level analysis may evaluate different vertical alignments alternatives and will provide site-specific mitigation measures for the different vertical alignments. At a program level it is appropriate to consider impacts significant and unavoidable until a more detailed analysis can be performed to examine specific impacts

taking into account vertical alignment options and their specific mitigation measures.

Refer to Chapter 2 of the Partially Revised Draft Program EIR regarding noise and vibration and the number of freight train movements through the corridor. The severity of specific vibration impacts will be further analyzed as part of a project-level environmental analysis and be dependent of the type and age of construction of nearby buildings and the type of soils. Also refer to 4-257 regarding noise and vibration including a discussion of train horns.

It should be noted, that the Authority placed its project-level work for San Francisco to San Jose on hold in May 2011. No decisions have been made about a second-tier project or the scope of environmental analysis in a second-tier EIR. At this time, it is anticipated that any further work on a second-tier project would have to start afresh, with a new second-tier planning and CEQA process and a new notice of preparation.

33-506

Refer to Standard Response 1 regarding the blended system concept and phased implementation. See also Responses to Comments 35-74 and 58-140 regarding ridership and Response to Comment 56-111 regarding the Altamont Corridor Rail Project. Refer to Chapter 5 of the 2010 Revised Final Program EIR regarding capital costs for the San Francisco to San Jose Corridor which includes costs for property acquisitions.

33-507

The comment is acknowledged. Any future land-use decision on behalf of the PCJPB and Authority, including a transfer of ownership and maintenance between the agencies and/or elimination of freight service in the corridor, is speculative and outside of the scope of this Program EIR. If a second-tier San Francisco to San Jose Section environmental document is restarted, any new agreements or decisions with respect to a change in the freight service in the Caltrain Corridor will be considered as part of the environmental setting of that project-level document.

As to increased rail service on the Peninsula, Caltrain electrification with increased service has been the subject of prior PCJPB project environmental analysis, which analyzed the impact of electrification and 6 trains per hour, which is one train more per hour per direction than Caltrain operates today. The possibility of additional trains being HST trains would need to be evaluated as part of any future environmental analysis of the corridor. In general, blended operation on the Caltrain Corridor would have fewer impacts than the full system HST alternative that was assessed in detail because additional right-of-way would not be required, passenger volumes and associated passenger related traffic impacts at station areas would be lower, construction of a complete four-track system and its associated impacts would not have occurred, and other issues discussed in the Partially Revised Draft Program EIR would be anticipated to be less severe. Refer to Standard Response 1 and Chapter 5 in the Partially Revised Final Program EIR for more discussion of the environmental implications of blended system, including traffic.

33-508

The comment suggests that the ridership forecasts relied upon in the Program EIR are "highly under suspicious." The Authority in the EIR process has taken reasonable steps to avoid the "highly under suspicious" numbers alleged in the comment.

- 1) The ridership and revenue model was developed by a nationally recognized leader in forecasting, Cambridge Systematics (CS). A full description of the model development and the forecasts has been provided in the ridership and revenue documentation that has been available on the Authority website since 2007.
- 2) In the Town of Atherton CEQA litigation, the Superior Court concluded the model was supported by substantial evidence. The Atherton court rulings are posted on the Authority's website.
- 3) The Authority's ridership and revenue peer review panel of leading U.S. and international experts in travel forecasting found that the modeling "produces results that are reasonable and within expected ranges for the current environmental planning and

Business Plan applications". [Independent Peer Review Panel, August 1, 2011]

A range of ridership forecasts has been used in the Program ER to evaluate potential negative and positive impacts of the HST. For negative impacts such as noise or traffic around stations, a high level of ridership and HST activity was assumed. For positive impacts such as energy savings or greenhouse gas emissions reductions, a low level of ridership and HST activity was assumed. In each case, the ridership is conservative and reasonable for the evaluation of impact.

The comment also implies that the Authority's independent ridership peer review panel is somehow biased. While two members of the current Peer Review Panel participated in a more limited role as peer reviewers during the development of the original model, the reviewers did not develop the model. Since the panel was charged with assessing the model, the original ridership and revenue model development cannot be characterized as "their own work." The current Peer Review Panel work differs from the earlier peer reviewers' role in its independent position. The panel runs its own meetings, elicits additional information from Cambridge Systematics to judge the reasonableness of models and results, and issues its own reports.

The comment also suggests that an agreement with UPRR must be reached prior to certification of the Revised Final Program EIR. While reaching agreement with the Union Pacific Railroad is needed before actions can be taken that affect their property and operations, the certification of an EIR does not require any such agreement to have been reached.

Submission 34 (Caren Chappell, February 19, 2012)

19th February 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
Attn: Bay Area to Central Valley HST Partially Revised Program EIR Comment

Bay Area to Central Valley HST Partially Revised Program EIR Commentary:

34-81 Besides the viability of the overall project, my primary concern is the persistence of the 4 tracks plan from San Jose to San Francisco area. There is no room to do this without ruining the well-developed Peninsula area, and residents of the Peninsula have protested this since the beginning of the project plans.

Though elected officials attempted to remove the most damaging effects of the planning for this corridor by the elimination of elevated tracks, staying primarily within the current foot-print of the Caltrain ROW, and reducing the scope of the EIR to two tracks within the Caltrain ROW, it appears that the EIR as it is today still includes the eventual build out of four tracks. The limited scope does not appear in the revised scope of the EIR. This is not acceptable. The revised EIR suggests phasing, which is not the same thing.

The idea of phasing to a four track system has not been promoted by the elected officials as evidenced by Senator Simitian April 28, 2011. In a Senate Budget sub-committee meeting, Senator Simitian asked Mr. van Ark and his counsel, "Does CEQA require you to do an EIR for a project you do not propose to build?" He then says he thinks the answer will be no. Then offers the reason for this question: "he does not want to see an EIR done that "acts as sword over the head of every property owner up and down this very developed 50 mile stretch of the corridor." See the full you-tube 30 minutes on the Senator and CEO Van Ark's exchange about the blended system. http://www.youtube.com/watch?v=6x_OTZBobY

Blended and phased are massively different concepts. The blended concept proposes one build out, two tracks, within the Caltrain ROW and that is it. The phased concept, could mean more than one construction period if money is found, and it implies that four tracks could be built.

34-483 A certified Program EIR with a four track option, with the option of an aerial structure will do exactly what the citizens of the peninsula have fought all along and what Senator Simitian cautioned against: putting a sword over the head of every property owner along the corridor. Unlike some of the other cities further north and closer to the City of San Francisco, the Caltrain Corridor is heavily populated. To have more than one build

34-483 out in a commercial, vacated or blighted area is one thing, to suggest more than one building period in a populous area is quite another.

34-484 Even if the project never moves forward, the phased plan and potential four-track build permanently reduces the property values of homeowners and businesses along the route and hampers their ability to sell their property at what, before the announcement of the rail project, was significant value. The losses thereby will be significant if liquidation is necessary due to relocation of a job, retirement, or estate liquidation.

The current business plan outlines that high-speed rail will not reach the Transbay Terminal until after 2034 and that only if all the money falls in place, which is highly unlikely. If the dollars do not materialize, the EIR will in time be considered stale and invalid by the courts. Continuing with this EIR with the project description as currently stated damages the communities, whether or not it moves forward. The cities and communities will challenge it in court should there be any attempt at a subsequent phase.

34-82 We need to see the Attorney General's opinion on the Blended system as proposed by Simitian, Eshoo and Gordon (SEG). If the AG's office is in agreement that this design is acceptable and in compliance with IA and CEQA, the EIR must be rewritten to specify the Blended system.

As currently proposed with high speed rail running 2 to 4 trains per hour and Caltrain six, on a non-grade separated track at grade level, the result will be severe traffic disruption in the cities the rail crosses. This assumes 170 plus trains per day is and unacceptable burden on the cities and their populations. The system should be built in its entirety underground, where it belongs as a subway system, similar to those in Europe when going through heavily populated residential areas.

34-83 There are many aspects of this project that are not in compliance with the law. These examples apply to any area being developed to high-speed rail. One is the starting section (ICS) in the Central Valley which is not legally compliant with Prop 1A. HSRA is required to build a "high-speed rail usable segment or high-speed rail ready corridor and show that the funds are in hand to do so". \$25 to 30 billion are needed to do this in the 'least expensive' part of the state. We have \$6 billion in matched funds. What the Authority proposes is a construction site with tracks only. Even with electrification this does not meet the definition of High-Speed Rail ready. The Authority does not have the funds to legally start the first section outlined in AB 3034. But the Authority claims, they are "on the path" to compliance with the Initial Operating Segment. (IOS) which will be determined later. This is not in compliance with AB3034.

Also uncompliant is that the Board approved a funding plan before all environmental work has been completed on the usable segment or the corridor that may be selected.

Submission 34 (Caren Chappell, February 19, 2012) - Continued

34-83

The board approved a funding plan for the project site they proposed in the central valley which is not environmentally cleared. Neither has the Peninsula section been environmentally cleared.

The public has been told that the certain methods and projects are forbidden and now they are acceptable for the Authority because the project is being done in phases and they are "on the path to compliance." This is nonsense.

Examples: Our cities were told that stopping in San Jose was illegal. Former Authority members Quentin Kopp and Rod Diridon said in public many times that stopping in San Jose was forbidden in IA. Now in what is being proposed as a 'faster start' for Northern California, passengers from the south will terminate at Diridon station and transfer to Caltrain for some temporary time in the future. How is this "On the path to compliance"?

In the April 2011 Senate Budget Subcommittee meeting, CEO Van Ark, told Senator Simitian what he was planning for the peninsula as a first phase was not IA compliant. He was worried about making the trip from San Jose to San Francisco in 30 minutes, in fact in the letter to the Attorney General in September 2011, he states it will be 32 minutes.

In addition the high-speed rail tracks will not be grade separated in the first phase and there must be passing tracks since high-speed trains must have a way to pass commuter rail. Van Ark also said the high-speed train cannot operate on the existing tracks; they have to be re-built and straightened out. He insisted that the full build out was part of the CEQA description and there would be more than one phase, unclear how many. This makes permanent at-grade, the cheapest design option, since there may well never be another phase.

Another Program level EIR must be developed removing requirements that are in violation of the SEG minimum standards that are present in the document so the Authority does not claim, "over-riding considerations," later and go with the 4 track option even if it is not necessary in the Attorney General's eyes. It must be out of the document so this cannot be done. The idea that the smaller scope project could be developed in the Project level EIR is risky for everyone who has worked with the Authority previously. The board before this current board could not be trusted and from the demonstration of the Draft Business Plan this board cannot be trusted either. There is no accounting for what future boards will decide. Some level of insurance is not to have a Program EIR with the larger scope program certified.

34-84

We need to step back and develop a state-wide plan for transportation which could include high-speed rail after appropriate changes are made to regional transportation. To build high-speed rail first when the connection points for high-speed rail are not there is foolish. Misallocating the bond money to local transportation agencies subverts the

34-84

intent of Prop 1A. Perhaps if given a chance to prioritize spending, the public would spend it on education or water projects and not transportation at this time. Using the bond money for non-high-speed rail projects is not what was intended.

34-85

In this revised EIR, many of the traffic and noise impacts for the peninsula that document shows as "unavoidable and significant," would not be either if an underground alternative was selected. Is the categorization of these impacts, "unavoidable and significant," in an at grade solution? A predetermining of design alternatives before the CEQA process has been completed is not permitted. Caltrain said in their meeting in San Mateo on February 17, 2012 that the route would be on two tracks and at grade. CEQA does not permit that an alternative be dismissed because of cost alone.

CEQA says: (Public Resources Code Section 21002.1), "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Removing options such as the covered trench option in Menlo Park and Palo Alto should not be permitted at this time by defining the project as at grade.

The idea that Caltrain and freight tracks might move closer to the communities, has major impacts to residences nearby the tracks. Does that mean that the residents can never open their windows again? Certainly there would be damage to residences that will be shaken more severely with the weight of freight trains passing at closer range. There is nothing that addresses the sound of the horns to the communities, even louder if they are closer and this makes the quality of life to those who live even more than a mile away, significantly damaged. There is much said about the need for these horns because of deaths on the tracks, some of which are documented suicides. What about the health and well-being of the people who listen to the shrill and blast of horns, getting more severe over the years on a daily basis?

34-86

Because of so many changes to the cost and the length of time it will take to finish the route, a revisit of both the blended Peninsula system and cost analysis and blended system for Altamont's route should be done. Adding independently verified ridership numbers would also offer true apples to apples comparison. There is time to do it right, there is no official start date of September 30, 2012.

Some people including Senators Simitian and Lowenthal support a pause in the project. Let's regroup and look at the problems. Perhaps a bonafide ridership model could be developed in the next 12-18 months. There were a few minor modifications done to the model that was developed in 2007 but it is basically the same old model.

Submission 34 (Caren Chappell, February 19, 2012) - Continued

34-86 | Certainly a \$13.5 billion dollar estimate for this corridor which does not include all the costs deserves a more critical and objective eye. Proper eminent domain cost numbers are lacking and there has never been an honest analysis of other alternatives and the net cost of each. Where are honest numbers for our corridor? Where are honest numbers for Altamont?

34-87 | I do not support the Joint Powers Board giving or selling to the High-Speed Rail Authority any real estate interest in the Caltrain Corridor. The land for this ROW was purchased by the people of this county and other counties. The board members of the JPB are supposed to be good stewards of the management of this corridor and are not supposed to trade off its use in exchange for electrification or other benefits to keep Caltrain viable. Trading the ROW to the HSR to obtain electrification of Caltrain is a fool's bargain.

34-88 | The Authority has refused to re-examine the ridership numbers honestly and openly and have come under fire by many independent groups such as UC Berkeley, ITS, the state Auditor, the LAO's office and the Independent Peer Review group. HSRA must recognize that the numbers are highly suspicious. To echo the Auditor's words, the ridership review panel is a "hand-picked group of individuals". To know that two members reviewed the original Cambridge model in earlier years is a major problem for the objectivity of the work of this panel. Criticizing the plan, would in fact be criticizing their own work. There is also credible suspicion that at least one member of the ridership panel received consulting work from Cambridge Systematics which should have been disclosed and is possibly grounds for ineligibility for the panel.

The ridership issue must be addressed before the Bay Area to Central Valley Program EIR is certified. The legality of the blended plan must be addressed before the EIR is certified, and permission must be granted by Union Pacific (which is one year overdue per the State Auditor's report) before this Program EIR is certified that damages communities up and down this corridor.

I would like a response and appropriate action in answer to my comments, many of which will be echoed by the cities of peninsula cities.

Caren Chappell (carenchappell@yahoo.com)

Response to Submission 34 (Caren Chappell, February 22, 2012)

34-81

Please refer to Standard Response 1 and Chapter 5 regarding the blended system approach.

As described in Section 2.5.1A of the 2008 Final Program EIR, one HST alignment alternative, the Caltrain Alignment (Shared-Use Four-Track), was evaluated for the San Francisco to San Jose Corridor at the program-level. Full build-out of this alignment alternative assumes that the HST system would share tracks with the Caltrain commuter trains, and that two other lines would provide freight service.

The blended system concept discussed in Section 5.1.3 of the Partially Revised Program EIR was first presented in the 2012 Draft Business Plan, and is highly conceptual at this stage. If this approach were implemented in the Caltrain Corridor between San Francisco and San Jose, it would result in the HST system sharing tracks with the existing Caltrain commuter service until the full build-out of the HST system, at which time the HST system would share two tracks with the Caltrain commuter trains, and the two other lines would provide freight service as discussed in the 2008 Final Program EIR. The blended system concept discussed in the 2012 Draft Business Plan is a version of the phasing approach, and would not result in a two-track full build-out scenario as the comment suggests.

34-483

The Partially Revised Draft Program EIR was prepared to fulfill the Authority's obligation under CEQA and to address November 2011 court rulings in the *Town of Atherton litigation challenging the 2010 Bay Area to Central Valley High-Speed Train (HST) Revised Final Program EIR*. This comment is important for the public discourse on the merits of the HST Project and whether it is viewed as an asset to the state. However, this comment does not address the adequacy of the EIR analysis or the Authority's compliance with CEQA. Refer to Standard Response 1 for more information regarding the blended system and phased implementation.

34-484

Refer to Standard Response 1 regarding the 2012 Business Plan. Also refer to Standard Response 6 in the 2010 Revised Final Program EIR regarding effects of the project on property values. The purpose of the Partially Revised Draft and Final Program EIR is to provide the environmental analysis to support a determination of the appropriate network alternative to link the San Francisco Bay Area with the Central Valley. As such, the analysis examines what can be considered a worst-case analysis over a very long time horizon. Maintaining this analysis in the program EIR does not constrain the Authority's ability to focus any second-tier analysis it may proceed with for San Francisco to San Jose on a more limited, blended system approach.

34-82

Refer to Standard Response 1 regarding the blended system concept and phased implementation. Also see Chapter 5 of the Partially Revised Final Program EIR regarding potential environmental impacts of phased implementation and a sample blended system approach. The comment appears to suggest that the blended system would involve no grade separations. A blended system for the Caltrain Corridor has not been defined at this time, but may include key grade separations. Vertical profile variations will continue to be considered for any second-tier project that is part of the selected network alternative.

34-83

This comment addresses several legal issues under Proposition 1A that are not comments on the Partially Revised Draft Program EIR analysis. Refer to Response to Comment 31-31 regarding the IOS. Please also refer to Standard Response 1 regarding the blended system approach and why it is fully consistent with CEQA to maintain the current project description this Partially Revised Final Program EIR. Maintaining the analysis of a four track system in the

program EIR does not constrain the Authority's ability to focus any second-tier analysis it may proceed with for San Francisco to San Jose on a more limited, blended system approach.

34-84

Refer to Response to Comment 5-70 regarding the 2005 Statewide Program EIR related to the state's transportation needs. The 2012 Draft Business Plan, including the preliminary phased implementation approach it presented, is consistent with requirements in Proposition 1A. Proposition 1A ensures that complementary rail capital improvements would be funded by a \$950 million portion of bond funds. These funds must be allocated to intercity, commuter and urban rail systems and shall provide direct connectivity and benefits to the HST system and its facilities or be part of the construction of the system. The phased implementation approach would be considered a complementary rail capital improvement project.

Furthermore, as discussed in the Response to Comment 26-26, it is the Authority's intent to maximize the utility of any funds that might be dedicated towards construction of improvements related to the phased implementation approach, and to ensure that such improvements would be able to be used in the full build-out of the HST system to the maximum extent feasible.

34-85

As the comment notes, some vertical alignments may reduce or increase potential impacts that would be associated with vertical alignments. The project-level analysis will take into account the vertical alignment characteristics, however this project-level analysis is presently on hold for the section from San Francisco to San Jose. Future project-level analysis may evaluate different vertical alignments alternatives and will provide site-specific mitigation measures for the different vertical alignments. At a program level it is appropriate to consider impacts significant and unavoidable until a more detailed analysis can be performed to examine specific impacts taking into account vertical alignment options and their specific mitigation measures.

Refer to Chapter 2 of the Partially Revised Draft Program EIR regarding noise and vibration and the number of freight train movements through the corridor. The severity of specific vibration impacts will be further analyzed as part of a project-level environmental analysis and be dependent of the type and age of construction of nearby buildings and the type of soils. Also refer to 4-257 regarding noise and vibration including a discussion of train horns.

34-86

Refer to Standard Response 1 regarding the blended system concept and phased implementation. See also Responses to Comments 35-74 and 58-140 regarding ridership and Response to Comment 56-111 regarding the Altamont Corridor Rail Project. Refer to Chapter 5 of the 2010 Revised Final Program EIR regarding capital costs for the San Francisco to San Jose Corridor which includes costs for property acquisitions.

34-87

The comment is acknowledged. Any future land-use decision on behalf of the PCJPB and Authority, including a transfer of ownership and maintenance between the agencies and/or elimination of freight service in the corridor, is speculative and outside of the scope of this Program EIR. If a second-tier San Francisco to San Jose Section environmental document is restarted, any new agreements or decisions with respect to a change in the freight service in the Caltrain Corridor will be considered as part of the environmental setting of that project-level document.

As to increased rail service on the Peninsula, Caltrain electrification with increased service has been the subject of prior PCJPB project environmental analysis, which analyzed the impact of electrification and 6 trains per hour, which is one train more per hour per direction than Caltrain operates today. The possibility of additional trains being HST trains would need to be evaluated as part of any future environmental analysis of the corridor. In general, blended operation on the Caltrain Corridor would have fewer impacts than the full system HST alternative that was assessed in detail because additional right-of-way would not be required, passenger volumes

and associated passenger related traffic impacts at station areas would be lower, construction of a complete four-track system and its associated impacts would not have occurred, and other issues discussed in the Partially Revised Draft Program EIR would be anticipated to be less severe. Refer to Standard Response 1 and Chapter 5 in the Partially Revised Final Program EIR for more discussion of the environmental implications of blended system, including traffic.

34-88

The comment suggests that the ridership forecasts relied upon in the Program EIR are “highly under suspicious.” The Authority in the EIR process has taken reasonable steps to avoid the “highly under suspicious” numbers alleged in the comment.

- 1) The ridership and revenue model was developed by a nationally recognized leader in forecasting, Cambridge Systematics (CS). A full description of the model development and the forecasts has been provided in the ridership and revenue documentation that has been available on the Authority website since 2007.
- 2) In the Town of Atherton CEQA litigation, the Superior Court concluded the model was supported by substantial evidence. The Atherton court rulings are posted on the Authority’s website.
- 3) The Authority’s ridership and revenue peer review panel of leading U.S. and international experts in travel forecasting found that the modeling “produces results that are reasonable and within expected ranges for the current environmental planning and Business Plan applications”. [Independent Peer Review Panel, August 1, 2011]

A range of ridership forecasts has been used in the Program ER to evaluate potential negative and positive impacts of the HST. For negative impacts such as noise or traffic around stations, a high level of ridership and HST activity was assumed. For positive impacts such as energy savings or greenhouse gas emissions reductions, a low level of ridership and HST activity was assumed. In each case, the ridership is conservative and reasonable for the evaluation of impact.

The comment also implies that the Authority’s independent ridership peer review panel is somehow biased. While two members of the current Peer Review Panel participated in a more limited role as peer reviewers during the development of the original model, the reviewers did not develop the model. Since the panel was charged with assessing the model, the original ridership and revenue model development cannot be characterized as “their own work.” The current Peer Review Panel work differs from the earlier peer reviewers’ role in its independent position. The panel runs its own meetings, elicits additional information from Cambridge Systematics to judge the reasonableness of models and results, and issues its own reports.

The comment also suggests that an agreement with UPRR must be reached prior to certification of the Revised Final Program EIR. While reaching agreement with the Union Pacific railroad is needed before actions can be taken that affects their property and operations, the certification of an EIR does not require any such agreement to have been reached.

Submission 35 (Kathy A. Hamilton, February 18, 2012)

February 18, 2012

John Mason
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
Attn: Bay Area to Central Valley HST Partially Revised Program EIR Comment

Bay Area to Central Valley HST Partially Revised Program EIR Commentary:

35-55 Besides the total viability of the overall project, my primary concern is the persistence of the 4 tracks from San Jose to San Francisco area. There is not room to do this without ruining the well-developed Peninsula area.

Though elected officials attempted to remove the most damaging effects of the planning for this corridor such as the elimination of elevated tracks, staying primarily within the current foot-print of the Caltrain ROW and the reduction of the full scope of the EIR as it is today which includes the eventual build out of four tracks. It was considered a starting point, and fact those terms were not even part of the revised scope of the EIR is not acceptable. They are mentioned both in the business plan and this EIR but primarily in the context of phasing, which is not the same thing.

Specifically, the idea of phasing to a four track system has not been promoted by the elected officials as evidenced by Senator Simitian April 28, 2011 in fact just the opposite. In a Senate Budget sub-committee meeting, Senator Simitian asked Mr. van Ark and his counsel, "Does CEQA require you to do an EIR for a project you do not propose to build?" He then says he thinks the answer will be no. Then offers the reason for this question: "he does not want to see an EIR done that "acts as sword over the head of every property owner up and down this very developed 50 mile stretch of the corridor." See the full you-tube 30 minutes on the Senator and CEO Van Ark's exchange about the blended system. http://www.youtube.com/watch?v=6x_OtZB0bY

Blended and phased are massively different concepts since the first, one, the blended concept. It proposes one build out and "you're done" and the other concept phased, could mean various phases definitely more than one construction period if money is found.

35-481 A certified Program EIR with a four track option, by the way with even the option of an aerial structure will do exactly what Senator Simitian cautioned against, putting a sword over the head of every property owner along the corridor. Unlike some of the other cities far north and closer to the City of San Francisco, the Caltrain Corridor is heavily populated. To have more than one build out in a commercial, vacated or blighted area

35-481 is one thing, to suggest more than one building period in a populous area is quite another.

35-482 Remember even if the project never moves forward you have permanently damaged the property values of homeowners and businesses along the route and hampered their ability to sell their property at what, before the announcement of the rail project, was significant values. The losses thereby will be significant if liquidation is necessary due to relocation of a job, retirement or estate liquidation.

The current business plan outlines that high-speed rail will not reach the Transbay Terminal until after 2034 and that's if all the money falls in place, which is highly unlikely. And if the dollars do not materialize, the EIR will in time be considered "stale and invalid by the courts, so why other than a placeholder, complete this EIR with a large scope project whose project description damages the communities whether or not it moves forward? The cities and communities will challenge it in court should there be any attempt at a subsequent phase.

Remember because the project does not have the money to conduct the project as outlined in Prop 1A should not be a reason that people suffer the consequences.

35-56 I want to see the Attorney General's opinion on the Blended system as proposed by Simitian, Eshoo and Gordon (SEG) and if the AG's office is in agreement that those minimum standards are acceptable and could be in compliance with IA and CEQA.

The blended system has consequences as well. As currently proposed with high speed rail running 2 to 4 trains per hour with Caltrain's six, on a non-grade separated at grade track, the result could be severe traffic disruption in the cities the rail crosses. This assumes an at-grade solution which will host 170 plus trains per day, a veritable race track for trains. This system should be built in its entirety underground, where it belongs as a subway system should, not in heavily populated residential areas.

35-62 There are many aspects of this project that are not in compliance with the law. These examples apply to any area being developed to high-speed rail. One is the starting section (ICS) in the Central Valley is not legally compliant with Prop 1A. You are required to build a "high-speed rail usable segment or high-speed rail ready corridor and show that you have the funds to do so. \$25 to 30 billion are needed we have \$6 billion in matched funds. What the Authority proposes is a construction site with tracks only, even with electrification, does not meet the definition of High-Speed Rail ready. The Authority does not have the funds to legally start the first section outlined in AB 3034. But the Authority claims, they are "on the path" to compliance with the Initial Operating Segment. (IOS) which will be determined later.

Submission 35 (Kathy A. Hamilton, February 18, 2012) - Continued

35-62

Another aspect that is not being complied to is that all environmental work has to be completed on the usable segment or the corridor that is selected before you submit a funding plan. The board approved a funding plan the project site they propose in the central valley is not environmentally cleared and neither is the peninsula.

The public has been told that the certain methods and projects are forbidden and now they are ok for the Authority because the project is being done in phases and they are "on the path to compliance."

Examples: Our cities were told that stopping in San Jose was illegal. Then Authority members Quentin Kopp and Rod Diridon said in public many times that stopping in San Jose was forbidden in IA. Now in what is being proposed a faster start for Northern California, passengers will terminate at Diridon station and transfer to Caltrain for some temporary time in the future. "On the path to compliance?"

In the April 2011 Senate Budget Subcommittee meeting, CEO Van Ark, told Senator Simitian what he was planning for the peninsula as a first phase was not IA compliant. He was worried about making the trip from San Jose to San Francisco in 30 minutes, in fact in the letter to the Attorney General in September 2011, he states it will be 32 minutes.

In addition the high-speed rail tracks will not be grade separated in the first phase and there must be passing tracks since high-speed trains must have a way to pass commuter rail. Van Ark also said the high-speed train cannot operate on the existing tracks; they have to be re-built and straightened out. He insisted that the full build out was part of the CEQA description and there would be more than one phase, unclear how many. It also solidifies the at-grade, the cheapest design option since there well may never be another phase.

I want to see another Program level EIR developed removing requirements that are in violation of the SEG minimum standards that are present in the document so the Authority does not claim, "over-riding considerations," later and go with the 4 track option even if it is not necessary in the Attorney General's eyes. It must be out of the document so this cannot be done. The idea that the smaller scope project could be developed in the Project level EIR is risky for everyone that has worked with the Authority previously. The board before this current board could not be trusted and from the demonstration of the Draft Business Plan this board cannot be trusted either. There is no accounting for what future boards will decide. Some level of insurance is not to have a Program EIR with the larger scope program certified.

35-63

Speaking of trust, Mr. Van Ark does not ask if the project scope can be reduced he asks instead this in his September 9, 2011 letter Deputy Attorney General Amy Winn, "Is there a time limit to achieving full compliance to the conditions of Proposition 1A in the

35-63

construction of a state-wide system? Then he perhaps hints to the Deputy Attorney General " don't tell us now" as he says, "recognizing that you cannot give a definitive or precise answer to the question at this point in time, can you provide guidance on the likely length of time that would be required to complete environmental review under the California Environmental Quality Act for the proposed system which contemplates a significant increase in train traffic?"

This line of questioning in fact shows that the CEO is not attempting to find out if a reduced scope in Program EIR would comply with both CEQA and IA, he is looking for justification of a phased implementation, what he wants to do.

But the timing of this decision has to be just perfect, the Authority doesn't want the answers disclosed until later, much later certainly after the certification of the Bay Area to Central Valley EIR and hopefully after the Merced to Fresno funding is approved. Peninsula legislative Reps hold influential positions in the funding process. Senator Simitian is the chairman for the Senate Budget sub-committee and Assembly member Rich Gordon holds the chair position for the Assembly Budget Committee.

Why not tell us now? Because it would throw a kink in the system if the answer is no- if it is determined the blended plan is not legal. Certainly a result that would be uproar of unhappy people on the peninsula. If the answer is yes its legal, it would also throw a kink in the Authority's plan for phased implementation. The project momentum loses both ways.

A better position, a safer one is the roll along saying were are trying, we are studying so the Authority gets past some key milestones, the certification of the Bay Area to Central Valley Program EIR/EIS and the certification of the Merced to Fresno project level EIR. That specific order is necessary because of the CEQA doctrine of tiering.

In addition any early start for this corridor will be vehemently protested by more lawsuits, now in the preparation stages. There is no certified EIR by either the Authority or more importantly Caltrain for the blended program that the Authority is promoting but not supported in this latest Program EIR. The funding of 3034 state you must have the money to complete a usable segment or a corridor and it must be high-speed rail ready. The law also has an order of affordability, starting with the least expensive first, moving forward. The peninsula is the most expensive segment so it's hard to imagine any start in the Bay area.

Congratulations, this idea of money to the ends using Prop 1A money is certainly ingenious on the board's part. It will certainly quiet regional transportation agencies that are in need of improvements. But let me remind you, their cooperation and silence does not change the law. Attempting to buy cooperation though scattering money to cities and transit agencies will not influence court decisions. It might put the legislators

Submission 35 (Kathy A. Hamilton, February 18, 2012) - Continued

35-63

who have to vote on the funding of the program in a more difficult spot but it will not change the laws.

Using IA money for the improvement to regional transit should not be permitted. While improvements are no doubt needed, IA money was exclusively for the use of high-speed rail, not regional transportation.

Do we need to step back and develop a state-wide plan for transportation which could include high-speed rail after appropriate changes are made to regional transportation? Yes. To build high-speed rail first when the connection points for high-speed rail are not there is foolish but don't attempt to build them with the \$9 billion in voter approved which is exclusively for the use of high-speed trains. Use the \$995 million exclusively dedicated to connectivity, but not the \$9 billion. The spending of the bond money will still overburden the state no matter what it is spent on. Perhaps if given a chance to prioritize spending, the public would spend it on education or water projects and not transportation at this time. Using the bond money for non-high-speed rail projects is not what was intended. The ends do not justify the means.

The Authority might argue that using IA money for these connection points, under the guise of being on "the path to compliance for high-speed rail" works. It might fly if there was a credible expectation that the money to build the system would be forthcoming. But there is no credible source of capital forthcoming, there is no credible source of money on the horizon to fund a \$200 billion project for phase one. Why so high? Because in the State Auditor's report issued in January 2012, there is a huge gap in unreported operating costs- to be exact, \$97 billion dollars found the business plan by the Auditor. <http://www.bsa.ca.gov/pdfs/factsheets/2011-504.pdf> So in fact the actual numbers for the project could exceed \$200 billion without building phase 2 may in fact bring overall system project costs to over \$300 billion, compared with numbers originally presented to the public with in IA, around \$42 billion with inflation factors build in. As one newspaper reported would Oakland, Sacramento and San Diego ever have voted for high-speed rail if they realized they would never see the train?

35-71

But back to this revised EIR, many of the traffic and noise impact for the peninsula in this document lists impacts as "unavoidable and significant," would not be either if an underground alternative was selected. Is the categorization of these impacts, "unavoidable and significant," an at grade solution? A predetermining of design alternatives before the CEQA process has been completed is not permitted. Caltrain said in their meeting in San Mateo on February 17, 2012 that the route would be on two tracks and at grade. Let me remind you that CEQA does not insist that an alternative be dismissed because of cost alone.

35-71

CEQA says: (Public Resources Code Section 21002.1), "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Removing options such as the covered trench option in Menlo Park and Palo Alto should not be permitted at this time by defining the project as at grade. Surely the project doesn't suggest that they would re-construct the line underground after invest billions in an "at grade" design.

The idea that Caltrain and freight tracks might move closer to the communities, has major impacts to residences nearby the tracks. Does that mean that the residents can never open their windows again? Certainly there would be damage to residences that will be shook more severely with the weight of freight trains passing at closer range. There is nothing that addresses the sound of the horns to the communities, even louder if they are closer and this makes the quality of life to those who live even more than mile, significantly damaged. There is much said about the need for these horns because of deaths on the tracks, some of which are documented suicides. What about the health and well-being of the people who listen to the shrill and blast of horns, gotten more severe over the years on a daily basis?

35-73

Because of so many changes to the cost and the length of time it will take to finish the route, a revisit of both the blended Peninsula system and cost analysis and blended system for Altamont's route should be done. Adding independently verified ridership numbers would also offer true apples to apples comparison. There is time to do it right, there is no official start date of September 30, 2012.

Some people including Senators Simitian and Lowenthal support a pause in the project. Let's regroup and look at the problems. Perhaps a bonafide ridership model could be developed in the next 12-18 months. There were a few minor modifications done to the model that was developed in 2007 and it's basically the same old model.

Certainly a \$13.5 billion dollar estimate for this corridor which by the way does not have complete cost deserves a more critical and objective eye. For instance this corridor does not include proper eminent domain cost numbers and never has it truly analyzed other alternatives and the net cost of doing each. Where are honest numbers for our corridor? Where are honest numbers for Altamont?

35-72

Just to make it perfectly clear, I do not support the Joint Powers Board giving or selling to the High-Speed Rail Authority any real estate interest for the Caltrain Corridor. The land for this ROW was purchased by the people of this county and other counties. The board members of the JPB are supposed to be good stewards in the management of

Submission 35 (Kathy A. Hamilton, February 18, 2012) - Continued

35-72

this corridor and not supposed to trade off its use in exchange for electrification or other benefits to keep Caltrain viable. The facts aren't in on Caltrain. Where are the ridership projections that will show full trains with 170 trains a day going down the peninsula? - Six for Caltrain and two to four trains per hour for high-speed rail, racing down the corridor during the commute hours. Trading rights of this valuable peninsula right of way for the money for electrification of the corridor indeed is a cheap price to pay yet a heavy price to pay by the residents of the counties, through which this proposed train will travel.

35-74

The Authority has also refused to re-examine the ridership numbers honestly and openly and have come under fire by many independent groups such as UC Berkeley, ITS, the state Auditor, the LAO's office and the Independent Peer Review group. You must recognize that your numbers are highly under suspicious. To echo the Auditor's words, the ridership review panel is a "hand-picked group of individuals." And to know that two members reviewed the original Cambridge model in earlier years is a major problem for the objectivity of the work of this panel. Criticizing the plan, would in fact be criticizing their own work. There is also a credible suspicion that at least one member of the ridership panel received consulting work from Cambridge Systematics which should have been disclosed and possibly grounds for ineligibility for the panel.

It is my opinion that ridership issue must be addressed before the Bay Area to Central Valley Program EIR is certified. The legality of the blended plan must be addressed before the EIR is certified and permission must be granted by Union Pacific which is one year overdue per the State Auditor's report before this Program EIR is certified that damages communities up and down this corridor.

I would like a response and appropriate action in answer to my comments many of which will be echoed by the cities of peninsula cities.

Kathy A. Hamilton
Menlo Park, Ca.
Katham3@aol.com

Response to Submission 35 (Kathy A. Hamilton, February 22, 2012)

35-55

Please refer to Standard Response 1 and Chapter 5 regarding the blended system approach.

As described in Section 2.5.1A of the 2008 Final Program EIR, one HST alignment alternative, the Caltrain Alignment (Shared-Use Four-Track), was evaluated for the San Francisco to San Jose Corridor at the program-level. Full build-out of this alignment alternative assumes that the HST system would share tracks with the Caltrain commuter trains, and that two other lines would provide freight service.

The blended system concept discussed in Section 5.1.3 of the Partially Revised Program EIR was first presented in the 2012 Draft Business Plan, and is highly conceptual at this stage. If this approach were implemented in the Caltrain Corridor between San Francisco and San Jose, it would result in the HST system sharing tracks with the existing Caltrain commuter service until the full build-out of the HST system, at which time the HST system would share two tracks with the Caltrain commuter trains, and the two other lines would provide freight service as discussed in the 2008 Final Program EIR. The blended system concept discussed in the 2012 Draft Business Plan is a version of the phasing approach, and would not result in a two-track full build-out scenario as the comment suggests.

35-481

The Partially Revised Draft Program EIR was prepared to fulfill the Authority's obligation under CEQA and to address November 2011 court rulings in the *Town of Atherton litigation challenging the 2010 Bay Area to Central Valley High-Speed Train (HST) Revised Final Program EIR*. This comment is important for the public discourse on the merits of the HST Project and whether it is viewed as an asset to the state. However, this comment does not address the adequacy of the EIR analysis or the Authority's compliance with CEQA. Refer to Standard Response 1 for more information regarding the blended system and phased implementation.

35-482

Refer to Standard Response 1 regarding the 2012 Business Plan. Also refer to Standard Response 6 in the 2010 Revised Final Program EIR regarding effects of the project on property values. The purpose of the Partially Revised Draft and Final Program EIR is to provide the environmental analysis to support a determination of the appropriate network alternative to link the San Francisco Bay Area with the Central Valley. As such, the analysis examines what can be considered a worst-case analysis over a very long time horizon. Maintaining this analysis in the program EIR does not constrain the Authority's ability to focus any second-tier analysis it may proceed with for San Francisco to San Jose on a more limited, blended system approach.

35-56

Refer to Standard Response 1 regarding the blended system concept and phased implementation. Also see Chapter 5 of the Partially Revised Final Program EIR regarding potential environmental impacts of phased implementation and a sample blended system approach. The comment appears to suggest that the blended system would involve no grade separations. A blended system for the Caltrain Corridor has not been defined at this time, but may include key grade separations. Vertical profile variations will continue to be considered for any second-tier project that is part of the selected network alternative.

35-62

This comment addresses several legal issues under Proposition 1A that are not comments on the Partially Revised Draft Program EIR analysis. Refer to Response to Comment 31-31 regarding the IOS. Please also refer to Standard Response 1 regarding the blended system approach and why it is fully consistent with CEQA to maintain the current project description this Partially Revised Final Program EIR. Maintaining the analysis of a four track system in the program

EIR does not constrain the Authority's ability to focus any second-tier analysis it may proceed with for San Francisco to San Jose on a more limited, blended system approach.

35-63

The commenter is correct in pointing out that the Authority is seeking a clarification from the Attorney General on the use of Proposition 1A funds for construction of "blended systems" throughout the statewide high-speed train system (refer to Standard Response 1 for more information about blended systems). At the time of writing this response, the Authority has not received a response to their September 9th, 2011 letter regarding the "blended system" from the Attorney General.

However, the commenter is incorrect in stating that the use of portions of the \$950 million for improvements to regional transit is illegal. These funds are available to transit agencies such as Caltrain, VTA, and BART with the requirement that these improvements shall provide direct connectivity and benefits to the high-speed train system and its facilities or be part of the construction of the system. Furthermore, as discussed in the Response to Comment 26-26, it is the Authority's intent to maximize the utility of any funds that might be dedicated towards construction of improvements related to the phased implementation approach, and to ensure that such improvements would be able to be used in the full build-out of the HST system to the maximum extent feasible.

35-71

As the comment notes, some vertical alignments may reduce or increase potential impacts that would be associated with vertical alignments. The project-level analysis will take into account the vertical alignment characteristics, however this project-level analysis is presently on hold for the section from San Francisco to San Jose. Future project-level analysis may evaluate different vertical alignments alternatives and will provide site-specific mitigation measures for the different vertical alignments. At a program level it is appropriate to consider impacts significant and unavoidable until a more detailed analysis can be performed to examine specific impacts

taking into account vertical alignment options and their specific mitigation measures.

Refer to Chapter 2 of the Partially Revised Draft Program EIR regarding noise and vibration and the number of freight train movements through the corridor. The severity of specific vibration impacts will be further analyzed as part of a project-level environmental analysis and be dependent of the type and age of construction of nearby buildings and the type of soils. Also refer to 4-257 regarding noise and vibration including a discussion of train horns.

35-73

Refer to Standard Response 1 regarding the blended system concept and phased implementation. See also Responses to Comments 35-74 and 58-140 regarding ridership and Response to Comment 56-111 regarding the Altamont Corridor Rail Project. Refer to Chapter 5 of the 2010 Revised Final Program EIR regarding capital costs for the San Francisco to San Jose Corridor which includes costs for property acquisitions.

35-72

The comment is acknowledged. Any future land-use decision on behalf of the PCJPB and Authority, including a transfer of ownership and maintenance between the agencies and/or elimination of freight service in the corridor, is speculative and outside of the scope of this Program EIR. If a second-tier San Francisco to San Jose Section environmental document is restarted, any new agreements or decisions with respect to a change in the freight service in the Caltrain Corridor will be considered as part of the environmental setting of that project-level document.

As to increased rail service on the Peninsula, Caltrain electrification with increased service has been the subject of prior PCJPB project environmental analysis, which analyzed the impact of electrification and 6 trains per hour, which is one train more per hour per direction than Caltrain operates today. The possibility of additional trains being HST trains would need to be evaluated as part of any future environmental analysis of the corridor. In general, blended operation on the Caltrain Corridor would have fewer impacts than the full

system HST alternative that was assessed in detail because additional right-of-way would not be required, passenger volumes and associated passenger related traffic impacts at station areas would be lower, construction of a complete four-track system and its associated impacts would not have occurred, and other issues discussed in the Partially Revised Draft Program EIR would be anticipated to be less severe. Refer to Standard Response 1 and Chapter 5 in the Partially Revised Final Program EIR for more discussion of the environmental implications of blended system, including traffic.

35-74

The comment suggests that the ridership forecasts relied upon in the Program EIR are “highly under suspicious.” The Authority in the EIR process has taken reasonable steps to avoid the “highly under suspicious” numbers alleged in the comment.

- 1) The ridership and revenue model was developed by a nationally recognized leader in forecasting, Cambridge Systematics (CS). A full description of the model development and the forecasts has been provided in the ridership and revenue documentation that has been available on the Authority website since 2007.
- 2) In the Town of Atherton CEQA litigation, the Superior Court concluded the model was supported by substantial evidence. The Atherton court rulings are posted on the Authority’s website.
- 3) The Authority’s ridership and revenue peer review panel of leading U.S. and international experts in travel forecasting found that the modeling “produces results that are reasonable and within expected ranges for the current environmental planning and Business Plan applications”. [Independent Peer Review Panel, August 1, 2011]

A range of ridership forecasts has been used in the Program ER to evaluate potential negative and positive impacts of the HST. For negative impacts such as noise or traffic around stations, a high level of ridership and HST activity was assumed. For positive impacts such as energy savings or greenhouse gas emissions reductions, a low level of ridership and HST activity was assumed. In each case, the ridership is conservative and reasonable for the evaluation of impact.

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Submission 37 (Kole Upton, F.M. Upton & Sons, February 21, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #37 DETAIL	
Status :	No Action Required
Record Date :	2/21/2012
Response Requested :	
Stakeholder Type :	CA Resident
Submission Date :	2/21/2012
Submission Method :	Website
First Name :	Kole
Last Name :	Upton
Professional Title :	Partner
Business/Organization :	F.M. Upton & Sons
Address :	
Apt./Suite No. :	
City :	Chowchilla
State :	CA
Zip Code :	93610
Telephone :	2097696062
Email :	kupton@inreach.com
Cell Phone :	
Email Subscription :	Merced - Fresno, San Jose - Merced
Add to Mailing List :	Yes

37-57

Stakeholder Comments/Issues :

The Merced to Fresno section of the project has been closed from public review and comment. Nevertheless, the Merced to San Jose document is still out for review, and it geographically interfaces with the Merced to Fresno section.

A perfect example of the problem created by this current approach by CHSRA and FRA toward the project occurred at the official 'Coordination' public meeting on 2/15/2012 between Chowchilla Water District (CWD), FRA, and CHSRA. At that meeting, the Acting Regional Director for CHSRA stated that City of Chowchilla representatives indicated to him that they could 'live' with a Road 13 route around the City of Chowchilla. This route is part of the infamous West Chowchilla Design Option (WCDO) section of the Hybrid Alternatives.

The following day I spoke to representatives of the City of Chowchilla. They indicated that the one consistent public position of the City of Chowchilla (written and verbal) was their continuing opposition to the Ave. 24/WCDO route.

The WCDO was put in play under false pretenses in July of 2010 when CHSRA claimed the City of Chowchilla wanted it. They did not want then, and they do not want it now. It is also opposed by every public agency with jurisdiction in the affected area. In fact, I challenge CHSRA and FRA to find one publicly elected official in Madera or Merced Counties that favors this route.

I would specifically refer you to Merced County Supervisor John Pedrozo (209-385-7366) whose district is affected by the WCDO route.

Nevertheless, in December of 2012, CHSRA promoted the WCDO as part of the 'Preferred Hybrid Routes' as part of the Merced to Fresno Section, but with the caveat that the 'Wye' section would be transferred for analysis to the Merced to San Jose EIR study group.

At the meeting on 2/15/2012, the representative of the Merced to San Jose study group indicated they were under a tight time frame and would prefer to consider only minor changes to the suggested routes. Rail officials suggested perhaps a slight change to the east of Road 13 for the WCDO.

Bottom line, CHSRA and FRA appear to be determined to inflict this WCDO route on this area in spite of the unanimous opposition to it.

The Merced to San Jose EIR should not be misused to justify improper decisions carried forward by the Merced to Fresno EIR and inserted in to the Program EIR. Work on the Merced to Fresno Draft EIR/EIS should cease immediately until all documentation and decisions have been finalized on the Program EIR, and that all information provided in the Program EIR be analyzed for consistency with the Merced to Fresno Project Level EIR/EIS.

EIR Comment :

No

Response to Submission 37 (Kole Upton, F.M. Upton & Sons, February 22, 2012)

37-57

Comment acknowledged. The second-tier Draft EIR/EIS for the Merced to Fresno Section circulated for public comment between August 15, 2011, and October 13, 2011. During that time, the Bay Area to Central Valley Revised Final Program EIR was being challenged in litigation, but no court ruling had been issued. The Authority circulated the Partially Revised Draft Program EIR in January 2012 to address court rulings that were issued in November 2011 and included in a final court order and ruling as of February 2012.

The Bay Area to Central Valley study area does overlap in part with the study area for the Merced to Fresno second-tier project. The Authority has made clear that it will not make any decision related to the wye connection between the Bay Area and Central Valley as part of the Merced to Fresno second-tier EIR/EIS. The Authority also intends to complete its revised program EIR process prior to completing its Merced to Fresno second-tier EIR/EIS process.

The comments address details about second-tier alternatives for the east/west alignment and wye connection between the Bay Area and

Central Valley. The Authority acknowledges the commenter's opposition to the West Chowchilla Design Option that has been studied as part of the second-tier Merced to Fresno Draft EIR/EIS. The Authority will continue detailed study of the east/west alignment and wye connection between the Bay Area and Central Valley as part of a San Jose to Merced Section second-tier EIR/EIS if the Authority selects a network alternative involving this area at the conclusion of the Program EIR process.

The commenter has attended multiple meetings as part of both second-tier Draft EIR/EIS for the Merced to Fresno and San Jose to Merced Draft EIR/EISs. At these meetings a range of potential configurations for the wye connection were available for review by the attendees.

The Authority intends to complete the revised program EIR process prior to completing its second-tier EIR/EIS process for the Merced to Fresno Section.

Submission 38 (Patricia Hogan-Giorni, February 20, 2012)

John Mason
 California High-Speed Rail Authority
 770 L Street, Suite 800
 Sacramento, CA 95814

February 20, 2012

Sent Via Email

Dear Mr. Mason,

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The purpose of this letter is to make comment on the *Bay Area to Central Valley High-Speed Train Partially Revised Draft Program Environmental Impact Report*. Although the Authority chose to open the 45 day Public Comment Period long before Judge Kenny signed the Notice of Entry of Judgment on February 1, 2012, I am respecting the Authority deadline for submitting that comment. Despite the fact that Judge Kenny ruled that:

- Recirculation is required to address noise, vibration, and construction impacts of shifting Monterey Highway;
- Recirculation is required to address traffic impacts on surrounding local roads due to narrowing Monterey Highway;
- Recirculation is required to address the impacts of potentially moving freight tracks closer to adjacent land uses along the San Francisco Peninsula;
- Recirculation is required to address impacts of reduced access to surface streets from potential lane closure along the San Francisco Peninsula;

It is my understanding that the entire *2010 Bay Area to Central Valley High-Speed Train Revised Final Program EIR* must be de-certified if it is to incorporate further comment. Therefore I take this opportunity to address certain other issues.

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I also note, for the record, that it is my firm belief that the CHSRA rushed to garner Public Comment before it was legally compelled to do so solely to have the PRDPEIR CEQA certified in order to not risk losing America Recovery and Reinvestment Act (ARRA) funds to meet the deadlines associated with them, and which should not be the basis for construction and environmental review decisions.

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The PRDPEIR is a fundamentally flawed document based upon the now stale initial *2008 Bay Area to Central Valley High-Speed Train Final Program EIR*, later certified as the *2010 Bay Area to Central Valley High-Speed Train Revised Final Program EIR*. It is apparent that assumptions made in 2008 have significantly changed in relation to the choice of the Pacheco Pass Preferred Alternative that include:

- Revision of the Business Plan (Chapter 5: New Information and Effect on Program EIR Analysis--an assessment of new information and changed conditions since the Authority's September 2, 2010 decisions based on the Revised Final Program EIR, including the Draft 2012 Business Plan, PRDPEIR Page 5-1) which remains incomplete and as yet unapproved and adopted.

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- There are multiple references in the Plan to the social benefits of HSR. However, they are not relevant to the financial legitimacy of the Program EIR, Project EIR or to the Business Plan (Draft 2012 Business Plan page ES-4). Therefore, documents, opinions and comments contained in the *Draft 2012 Business Plan* should not be used to inform the PRDPEIR.

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- 5.1.3 Draft 2012 Business Plan --The Authority's Draft 2012 Business Plan... has also been considered in the development of this Partially Revised Draft Program EIR... to comply with the requirements of Public Utilities Code section 185033, which requires the Authority to develop a Plan with the content specified in the statute, and offer it for public review and comment. The Plan represents an implementation strategy for construction of the HST system...[that]describes a phased approach. (PRDPEIR Page 5-3)

- Environmental impacts that result from the disconnect between the way the system was segmented for environmental review verses the way the system is being segmented for construction of an initial segment (ICS) and initial operating segment (IOS) must be reconciled (Draft 2012 Business Plan Chapter 2). Therefore, documents, opinions and comments contained in the *Draft 2012 Business Plan* should not be used to inform the PRDPEIR.

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- A THE DRAFT 2012 BUSINESS PLAN AND PHASED IMPLEMENTATION--The concept of phasing is not new for the HST system. Proposition 1A, passed by voters in 2008, contemplated that Phase 1 of the HST system would extend from San Francisco in the north to Los Angeles in the south, and that Phase 2 would then connect to Sacramento and San Diego. The discussion of phasing in the Draft 2012 Business Plan expands on this initial phasing described in Proposition 1A, and illustrates how construction of the statewide HST would be accomplished in further sub-phases (phases of implementation), as funding is available and project-level environmental review for individual sections of the system is completed. The initial construction section (ICS) is planned from north of Fresno to north of Bakersfield. This ICS would then be extended either over the Pacheco Pass to San Jose, as an Initial Operating Section north (IOS north), or south to the San Fernando Valley, as an Initial Operating Section south (IOS south). The IOS (either north or south) would then be extended to complete a "Bay to Basin" system extending from San Jose to the San Fernando Valley. The Bay to Basin system could then be extended to reach San Francisco in the north and Los Angeles/Anaheim in the south to complete Phase 1 of the system. Phase 2 of the system would expand Phase 1 to include from Merced north to Sacramento, and from Los Angeles south to San Diego. (PRDPEIR Page 5-3)
- Terminology is used in the Plan that is not consistent with Prop 1A. There is no mention of an ICS in Prop 1A. Therefore, there can be no legal bond expenditure for a HSR segment unless it is electrified and contains all the components of a true HSR system. (Draft 2012 Business Plan page2-9).

Submission 38 (Patricia Hogan-Giorni, February 20, 2012) - Continued

38-186 Therefore, documents, opinions and comments from *Draft 2012 Business Plan* contained in the Draft 2012 Business Plan should not be used to inform the PRDPEIR.

38-187 ○ The *Draft 2012 Business Plan*, which includes the phased implementation of the HST system, reflects that the cost of building the system will be higher than originally anticipated. In addition, phased implementation recognizes that funding for construction will not become available all at once, and therefore construction of the system will take longer than originally anticipated. For example, the 2008 Final Program EIR anticipated that the HST system would be fully constructed and operational in roughly 2020. The Draft 2012 Business Plan discloses that with phased implementation, and in light of increased costs and limits to financing, construction may take considerably longer, with completion of Phase 1 occurring in 2033. (PRDPEIR Page 5-3)

- Like the *2009 Business Plan* and other CHSRA documents, it would appear that the *Draft 2012 Business Plan* is capital constraint driven with a desire to use America Recovery and Reinvestment Act (ARRA) funds to meet the deadlines associated with them which should not be the basis for construction and environmental review decisions (Draft 2012 Business Plan Page 2-9)

Therefore, documents, opinions and comments contained in the *Draft 2012 Business Plan* should not be used to inform the PRDPEIR.

38-188 ○ For the highly urbanized sections between San Francisco and San Jose, San Fernando Valley and Los Angeles, as well as Los Angeles to Anaheim, a concept called a “blended system approach” is also described in the Draft 2012 Business Plan. The blended system would provide an additional phasing option for the urbanized sections that have existing commuter rail corridors, which would allow for integrating HST service into an existing commuter rail system with certain, limited upgrades, in advance of construction of the currently planned shared or dedicated HST facilities. For example, a passenger traveling from Los Angeles could potentially travel on dedicated, fully constructed HST facilities to a particular station, such as San Jose, and then continue with a “one-seat ride” that would have the HST complete its journey to San Francisco on an upgraded and electrified commuter rail line at slower speeds. The blended system concept has the potential to provide earlier travel benefits by allowing some level of HST service to reach San Francisco, Los Angeles, and Anaheim with a smaller investment than would be required for the fully constructed HST facilities. This approach is highly conceptual at this time. (PRDPEIR Page 5-4)

- To support both Caltrain and HSR in the Peninsula rail corridor, project concepts originally contemplated were based on a four-track rail system which would require major track expansion and fostering significant concerns about impacts to local communities. In 2011, a proposal was made by U.S. Congresswoman Anna Eshoo, State Senator Joe Simitian and State Assemblyman Rich Gordon [SEGway] to implement a smaller project with less

38-188 impacts - a “Blended System” in the Caltrain corridor. The blended system would support integrated high-speed rail and modernized Caltrain service on shared tracks in order to maximize the use of existing infrastructure, which is primarily a two-track system. This approach would keep the project substantially within the existing Caltrain right-of-way and minimize impacts to communities. The principles outlined by Senator Simitian, Congress Member Eshoo, and Assembly Member Gordon were:

- (1) No expansion of the Caltrain right of way beyond its current two-track configuration (with very minor exceptions permitted);
- (2) No aerial structures unless the local city or county governing body specifically requested such an aerial structure;
- (3) An environmental impact process that defined this system as “the project,” so that a system built with these constraints couldn’t be expanded later, without a significant new round of public hearing and environmental review.

In response, Caltrain conducted a capacity analysis, which determined that a blended system is operationally viable. Additional analysis will be conducted to explore the overall feasibility of the concept.

http://www.caltrain.com/projectsplans/Projects/Caltrain_Modernization_Program/High_Speed_Rail_Coordination.html

Therefore the “Blended System” should be considered as the only Preferred Project Alternative on the Caltrain ROW in the PRDPEIR.

38-189 ○ B. PHASED IMPLEMENTATION AND PRIOR PROGRAM EIR ANALYSIS Phased implementation does not change the HST project described and analyzed in the *2008 Final Program EIR*, the *2010 Revised Final Program EIR*, or in this *Partially Revised Draft Program EIR*. The Authority’s proposed project continues to be the statewide HST system, consistent with its statutory mission, and as described in Chapters 1 and 2 of the 2008 Final Program EIR. (PRDPEIR Page 5-4)

- The Caltrain DRAFT Planning Process for the Peninsula Rail Corridor *Capacity Analysis to Blended System Project Alternatives*, November 09, 2011 as well as the SEGway proposal does not envision the “additional phasing option for the urbanized sections that have existing commuter rail corridors, which would allow for integrating HST service into an existing commuter rail system with certain, limited upgrades, in advance of construction of the currently planned shared or dedicated HST facilities.” The SEGway “blended system approach” is “required...[to be] the fully constructed HST facility[.]” using the existing 2-track configuration on the Caltrain ROW with the addition of 2 passing tracks in a proscribed, limited area for the complete accommodation of HSR and Caltrain combined service on 2 tracks, and not a precursor to later phased implementation of a full 4-track buildout.

Submission 38 (Patricia Hogan-Giorni, February 20, 2012) - Continued

38-189 <http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Documents/DRAFT+Planning+Process.pdf> Therefore no Prop 1A funding can be legally allocated to the “blended system” unless it is determined to be phased implementation “in advance of construction of the currently planned shared or dedicated HST facilities,” or is defined as “the project,” so that a system built with these constraints couldn’t be expanded later, without a significant new round of public hearing and environmental review.

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- Lack of current Ridership analysis (6.3.3 Network Alternatives Evaluation D. COMPARISON OF PACHECO PASS AND ALTAMONT PASS ALTERNATIVES Ridership and Revenue: This overall conclusion is consistent with the previous ridership analysis done for the Authority’s 2000 Business Plan.)
 - Despite updates made to the ridership model prior to the publication of the Plan, all CHSRA has done with that model is to spread it out further over time. Ridership projection errors can only be fixed by the development of a new ridership model and release of a new Ridership Study. Until that is done no assumptions about ridership reflected in the *Draft 2012 Business Plan* can be considered reliable (Draft 2012 Business Plan Chapter 6). The Plan states that “Population has a direct correlation with ridership.” However it is not population alone which determines ridership estimates. Rather, it is population that can afford to ride HSR located in its vicinity. Therefore, generating ridership figures with projected population alone as an input is not reliable. Further, the consequences of this are exaggerated in a phased approach (Draft 2012 Business Plan page 6-5). Therefore, documents, opinions and comments contained in the *Draft 2012 Business Plan* should not be used to inform the PRDPEIR.

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- 2004 Memorandum of Understanding between the Peninsula Corridor Joint Powers Board (Caltrain) and the California High Speed Rail Authority http://www.caltrain.com/Assets/Peninsula+Rail+Program/2004_MOU_Between_CHSRA_and_PCJPB.PDF sets forth a framework for future cooperation between the CHSRA and the PCJPB after the CHSRA and the Federal Railroad Administration have completed the Final Program EIR/EIS for a proposed high speed train system for California and identifies a shared corridor concept as an alternative for evaluation in the 2008 Final Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS).
 - The MOU provides the political and economic (as the least expensive) nexus that determined that Pacheco would be the single Preferred Alignment Alternative that was analyzed in the 2008 Final Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and has since prejudiced any other objective look at route considerations and imposed a prohibition of

38-191 consideration of viable alternatives, such as the Setec Ferroviare (“Setec”) Development of three alternative Altamont alignments, as well as rejected a conceptual alternative connecting Highway 101 and the Caltrain alignment around and north of the San Francisco airport.

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- Bay Area to Central Valley HST Final Program EIR/EIS 2008 --E. HST ALIGNMENT ALTERNATIVES DEVELOPMENT-- The development of the alternatives considered in this Program EIR/EIS incorporated the principles established for the HST Alternative selected in the statewide program EIR/EIS and set forth in the Business Plan to minimize capital and operating costs while maximizing total benefits. The FRA and the Authority recognized that the HST system would require a commitment of substantial resources and addressed the broad issues related to the development of a proposed HST system in the statewide program EIR/EIS (California High-Speed Rail Authority and Federal Railroad Administration 2005). Based on the information developed in the earlier studies discussed above and the selected HST Alternative, as well as through public and agency coordination and scoping, the Authority and the FRA were able to identify potential alternatives for implementation of the proposed HST system in the study region. The Authority and the FRA began developing the alternatives by seeking to identify the most reasonable, practicable, and environmentally sensitive HST Alignment Alternatives and station locations for analysis in this Program EIR/EIS. As part of this process, alternatives previously considered were reevaluated, and a screening of potential alignment alternatives and station location options was conducted. This screening analyzed all reasonable and practical alignment alternatives and station location options within viable HST corridors. The evaluation of potential HST Alignment Alternatives and station location options used the following standardized criteria: construction, environment, land use compatibility, right-of-way, connectivity/accessibility, and ridership/revenue. (Page 2-13)
 - Alternatives may be eliminated from consideration in an EIR if they fail to meet most of the basic project objectives, are infeasible, or do not avoid significant environmental impacts. (CEQA Guidelines § 15126.6(c); (id. at § 15126.6(a) (EIR is “not required to consider alternatives which are infeasible”).) The EIR must identify those alternatives that “were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination.” (CEQA Guidelines § 15126.6(c).) An agency’s infeasibility finding must be supported by substantial evidence.
- U.S. Department of Transportation Federal Railroad Administration Record of Decision Bay Area to Central Valley High-Speed Train signed 12/2/08 pages 66-67 cites: 15. Decision---Concluding the Bay Area and Central Valley HST Program EIR/EIS, the FRA makes the following decisions:

Submission 38 (Patricia Hogan-Giorni, February 20, 2012) - Continued

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1. To select the Pacheco Pass Network Alternative with San Francisco and San Jose Termini and to reject the No Project Alternative, the Altamont Pass Network Alternatives, and the Pacheco Pass with Altamont Pass (Local Service) Network Alternatives; and
2. To adopt the design practices and mitigation strategies described in the MMRP (Appendix A) to minimize harm from the selected alternative; and
3. To eliminate certain conceptual HST alignments and station options evaluated in the Program EIR/EIS from further consideration; and
4. To select for further consideration in the tiered project environmental reviews to be prepared subsequent to the Program EIR/EIS, the preferred conceptual corridor, alignment, and station options for the HST as described in the Final Program EIR/EIS.

The FRA therefore finds that the transportation, environmental, land use, economic, and social benefits of the Preferred Pacheco Pass Network Alternative outweigh the adverse environmental impacts that will remain after adoption and application of all mitigation strategies listed in this document. (Pages 66-67)

- That the *Bay Area to Central Valley HST Final Program EIR/EIS 2008* and the *U.S. Department of Transportation Federal Railroad Administration Record of Decision Bay Area to Central Valley High-Speed Train* relied on any data gleaned from the *2008 Business Plan* and which has since proven unreliable and inaccurate, even through the *2009 Revised Business Plan* was presented to the Legislature, it begs the question of whether the Pacheco Alternative, presented as the only Preferred Alternative, especially in light of the fact that the Business Plan was informed by the *California High Speed Rail Corridor Evaluation*, December, 1999, prepared by Parsons Brinckerhoff which identifies 3 references to Altamont and 65 references to Pacheco, was indeed the “engineered” choice motivated by political and financial interests.

Therefore, documents, opinions and comments contained in the *2008 Bay Area to Central Valley High-Speed Train Final Program EIR* should not be carried forward to inform the PRDPEIR.

- *2008 Bay Area to Central Valley High-Speed Train Final Program EIR* 8.2 Summary of Comments on the Identification of the Preferred Alternative

The identification of a preferred HST alignment between the Bay Area and Central Valley is controversial, and this program EIR/EIS process has received a considerable amount of comment from agencies (federal, state, regional, and local), organizations, and the general public (for more details, see Chapter 10, “Public and Agency Involvement”). There is a wide divergence of opinion with many favoring the Pacheco Pass, many

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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).

8.2.1 Pacheco

The Pacheco Pass supporters include the Metropolitan Transportation Commission (MTC), (page 8-3)

8.2.1.1 Altamont

There are a considerable number of organizations, agencies, and individuals who 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; (page 8-4).

8.4 The 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 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 Final Program EIR/EIS but is accounted for in Section 3.17, “Cumulative Impacts,” of the Final Program EIR/EIS. ...

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). ... with an Altamont + Pacheco option, ... 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 (MTC, 2007, Regional Rail Plan, pg ES-17). (2008 Bay Area to Central Valley HST Final Program EIR/EIS Bay Area to Central Valley HST Final Program EIR/EIS)

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). (Pages 8-14, 8-15).

- The choice of Pacheco as the Preferred Alternative was prejudiced by reliance on documents submitted by the Metropolitan Transportation Authority that served to inform the *2008 Bay Area to Central Valley*

Submission 38 (Patricia Hogan-Giorni, February 20, 2012) - Continued

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High-Speed Train Final Program EIR. MTC's agenda was at the time, and remains to support BART expansion in the East Bay: http://www.mtc.ca.gov/news/press_releases/rel451.htm "BART's Warm Springs Extension Gets Boost from Regional Measure 2 Cash OAKLAND, Calif., Sept. 25, 2008...The Metropolitan Transportation Commission (MTC) this week committed \$91 million in voter-approved Regional Measure 2 bridge toll money to help finance an \$890 million extension of the BART system to Fremont's Warm Springs district. Construction of the 5.4-mile extension from the current terminus at the Fremont station — which would be the first leg of a planned \$6.1 billion extension of the BART system to Milpitas, San Jose and Santa Clara — is slated to begin in the summer of 2009. MTC made the financing pledge as part of a strategic plan for implementing the \$17.4 billion Regional Transit Expansion Program adopted by the Commission in 2001 and updated in 2006. The \$91 million approved this week for the Warm Springs BART extension originally was designated for rehabilitation of the old Dumbarton Rail Bridge and the launch of commuter rail service over the span." With the intention of shuffling the Dumbarton Rail Bridge financing toward the BART extension, there can be no doubt why MTC was so strongly in favor of the Pacheco choice, while giving lip-served accommodation to the Altamont and combined Altamont + Pacheco options. In keeping with "... 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," MTC proposes to modify the scope of the Dumbarton Rail operating project (RM2 Operating Project #5) in MTC Resolution 3801 so that RM2 funds may be used to support bus service in the Dumbarton corridor rather than rail service. <http://www.mtc.ca.gov/meetings/hearings/rm2.htm> MTC Resolution 3801: <http://www.mtc.ca.gov/meetings/hearings/tmp-3801.pdf> See Attachment A, pages 1-3; Attachment B, item 5, page 8 Therefore, documents, opinions and comments from MTC contained in the *2008 Bay Area to Central Valley High-Speed Train Final Program EIR* should not be used to inform the PRDPEIR.

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- The adopted *Amendment No. 1 to Agreement* (2004 Memorandum of Understanding between the Peninsula Corridor Joint Powers Board (Caltrain) and the California High Speed Rail Authority (http://www.caltrain.com/Assets/Peninsula+Rail+Program/Caltrain_MOU_Amendment1.pdf)) specifically establishes the Peninsula Rail Program, in order to coordinate the planning, design and implementation of proposed development programs for their respective intercity high speed rail and commuter rail rapid transit services in a manner that provides for the shared use of the existing Caltrain Rail Corridor between

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the cities of San Francisco and San Jose, with funding shared equally on a 50%-50% basis.--ESTABLISHMENT OF WORKING GROUP, ORGANIZATIONAL STRUCTURE The Peninsula Rail Program Scope of Work and Organization as described in Attachment A attached hereto and incorporated herein by this reference hereby is approved and adopted effective upon execution and delivery of this Amendment No. 1 to Agreement by the parties. This Amendment is not intended to constitute and does not constitute any limitation on the decision-making authority of any party:

- High Speed Rail Coordination In 2009, following voter approval of \$9 billion to plan and construct the state's high-speed rail system, Caltrain entered into an agreement with the California High-Speed Rail Authority to work in partnership to advance Caltrain corridor improvements that would support improved Caltrain service and high-speed rail service. Coordination with the California High-Speed Rail Authority (identified as the Peninsula Rail Program) is managed through the Caltrain Modernization Program. http://www.caltrain.com/projectsplans/Projects/Caltrain_Modernization_Program/High_Speed_Rail_Coordination.html
- The Peninsula Rail Program no longer exists with funding shared equally on a 50%-50% basis. It has metamorphosed into the Caltrain Modernization Program, encompassing several interrelated projects that will upgrade the performance, operating efficiency, capacity, safety and reliability of Caltrain's commuter rail service in movement toward electrifying its own system, while only managing the agency's coordination with CHSRA. While it is unknown whether CHSRA is funding any other aspect of the Caltrain Modernization Program, CHSRA is no longer paying 50% of the Program Manager's salary as was the case for the Peninsula Rail Program's Program Manager. Although the CMP's *Capacity Analysis to Blended System Project Alternatives* demonstrates that electrification of the corridor and installation of an advanced signaling system could provide sufficient track capacity to feasibly operate six electric Caltrain trains and two high-speed trains per hour, it is unknown whether CHSRA contributed funding for the Caltrain analysis which may indicate that it is a much-less intrusive, more cost-effective alternative. If it is determined that CHSRA has not contributed a 50% cost share of the *Capacity Analysis to Blended System Project Alternatives*, a mutually beneficial study, and if the CHSRA does not agree that the 2-track SEGway "Blended System" would constitute the final buildout phase rather than a step toward fully implementing a 4-track combined HST/Caltrain service, then the Peninsula Corridor Joint Powers Board should Resolve to Rescind the *2004 Memorandum of Understanding between the Peninsula Corridor Joint Powers Board (Caltrain) and the California High Speed Rail Authority and Amendment No. 1 to Agreement* which

Submission 38 (Patricia Hogan-Giorni, February 20, 2012) - Continued

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would effect the withdrawal of Caltrain's ROW from consideration as the HST Preferred connection from San Jose to San Francisco.

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For all the above reasons preceded by the black box indent, I repeat, the 2008 Bay Area to Central Valley High-Speed Train Final Program EIR is a stale document that no matter how it may be "Partially Revised" due to the February 1, 2012 judgment issued by Judge Kenny, or at any time in the future, it should not serve as the basis for any HST program or project development in California. The PRDPEIR **should not** be CEQA certified because it is apparent that assumptions made in 2008 have significantly changed in relation to the choice of the Pacheco Pass Preferred Alternative along with other factors that I have described above.

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CHSRA has yet to release all traffic data used to inform and support its conclusions in the PRDPEIR, including the actual traffic capacity studies for each project segment. The PRDPEIR needs to address the impacts of potentially moving freight tracks closer to adjacent land uses along the Caltrain ROW; as well as the impacts of reduced access to surface streets from potential lane closures along the San Francisco Peninsula. For an accurate assessment of the PRDPEIR all supporting data for the Authority's assertions must be provided to understand exactly how the conclusions were reached. Therefore, my comment from this point forward will not be so PRDPEIR document specific in following the previous bulleted format.

To comment on the requirement to address impacts of reduced access to surface streets from potential lane closure along the San Francisco Peninsula I offer the following:

- The CHSRA is in violation of *AB1358 (Leno) Complete Streets Act*, signed into law on September 30, 2008, that ensures that the transportation plans of California communities meet the needs of all users of the roadway including pedestrians, bicyclists, users of public transit, motorists, children, the elderly, and the disabled; and directs the State Office of Planning and Research to amend guidelines for the development of general plan circulation elements so that the building and operation of local transportation facilities safely and conveniently accommodate everyone, regardless of their mode of travel. State, regional, and local agencies across California are adopting complete streets ordinances, policies, and design guidelines. Some examples include: Caltrans Deputy Directive 64; Metropolitan Transportation Commission Resolution 3765; San Francisco Transit First city ordinance; Sacramento Transportation Authority local sales tax ordinance; San Diego Association of Governments local transportation sales tax ordinance; Santa Barbara General Plan Circulation Element; City of San Diego Street Design Manual.
- The CHSRA may be unwittingly opening itself, and municipal and county government agencies to future litigation and liability under the ruling of *Bonano v. Contra Costa County*, section 835.4, "therefore, the reasonableness of a public entity's creation or maintenance of a dangerous condition of its property must be balanced against the costs and benefits of alternative means of providing the public service, not against the alternative of discontinuing the public service."

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- The San Mateo County Comprehensive Bicycle and Pedestrian Plan adopted by the C/CAG Board on September 8, 2011, Appendix B, pages B6-B9; B11 <http://sanmateocountybikepedplan.org/index.php?cID=242>, defines the County's North-South Bicycle Route from Burlingame to Redwood City. Appendix C, pages C4-C5, defines the Pedestrian INDEX Walking Demand from Burlingame to Redwood City.
 - Any action approved by CHSRA through the PRDPEIR that will in any way diminish or remove existing Class II and Class III bicycle facilities on the North-South Bicycle Route from Burlingame to Redwood City, or interfere with future municipal planning that demonstrate installation of Class II and/or Class III, i.e. City of San Mateo Bicycle Master Plan August 2011, <http://www.ci.sanmateo.ca.us/DocumentView.aspx?DID=9216>; San Carlos' East Side Connect Project to Upgrade Old County Road & East San Carlos Avenue, <http://www.cityofsancarlos.org/eastsideconnect/default.asp>; Burlingame's Downtown Specific Plan <http://www.burlingame.org/Modules/ShowDocument.aspx?documentid=6825>, must be assessed under the constraints of *AB1358* (SEC. 2. The Legislature finds and declares all of the following: (h) It is the intent of the Legislature to require in the development of the circulation element of a local government's general plan that the circulation of users of streets, roads, and highways be accommodated in a manner suitable for the respective setting in rural, suburban, and urban contexts, and that users of streets, roads, and highways include bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, public transportation, and seniors.). Further, any action approved by CHSRA through the PRDPEIR that will in any way diminish or remove existing pedestrian or ADA mobility access, or interfere with future municipal planning that demonstrate installation of sidewalks, i.e. San Mateo County Comprehensive Bicycle and Pedestrian Plan, City of San Mateo Pedestrian Master Plan, <http://www.ci.sanmateo.ca.us/index.aspx?NID=2218>; San Carlos' East Side Connect Project, and Burlingame's Downtown Specific Plan, must be assessed under the constraints of *AB1358* (SEC. 2.(h)(bid)). Finally, a great economic burden is placed upon the County and the municipalities listed above in order to amend their Plans to meet the needs of the Program and Project which is in no way acknowledged in the *Draft 2012 Business Plan*, used to inform the PRDPEIR; or is there any mention of intent for reimbursement of those expenditures. That must be addressed in the *Draft 2012 Business Plan*. The Authority must also insure that any action to remove existing bicycle, pedestrian, or ADA requirements by either the County or the municipalities listed above in order to comply with the PRDPEIR will not subject them to liability under *Bonano v. Contra Costa County*, section 835.4.

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38-197

- o Potential lane closure along the San Francisco Peninsula, specifically in Burlingame where there are 4 existing at-grade RR crossings between Broadway and Peninsula Avenue (Oak Grove, North Lane, Howard Avenue, Bayswater Avenue), will significantly impact motor traffic, bicycle, and pedestrian circulation by virtually barricading access to Burlingame High School and the commercial and residential neighborhoods on either side of the Caltrain ROW.
 - Closure of any of these at-grade crossings in order to meet CHSRA financial constraints in providing grade separation to include all design considerations, except aerial structure or impenetrable berm solutions, would vastly increase traffic volume on California Drive and Carolan Avenue as motorists seek access to either the US101/Broadway or US101/Peninsula interchanges, or to simply travel from one side of the Caltrain ROW to the other, not only at peak commute hours but throughout the entire day. Closure would impede pedestrian movement across those thoroughfares, along with adding greater distance to access the opposite side of the Caltrain ROW. Higher traffic volume would severely limit on-street bicycle safety on both Class III bicycle facilities: <http://www.burlingame.org/Modules/ShowDocument.aspx?documentid=4730>. Closure would create enormous east-west traffic back-up on the Broadway and Peninsula Avenue arterials during am and pm peak commute hours if those thoroughfares continue to have at-grade crossings at any time before or during construction or at completion of the Project. Since the stipulation that Caltrain must be allowed to provide uninterrupted service during the course of Project construction (*Amendment No. 1 to Agreement* Ibid.), closure of any or all of the lanes would require that engineering design standards be developed to address existing at-grade and/or any proposed grade-separated solutions to avoid gridlock.

Any and all responsibility for financial incursions or liability that would fall upon the City of Burlingame in the event of any lane closures or with construction of any proposed grade-separated solutions must be addressed in the *Draft 2012 Business Plan* if that document serves to inform the PRDPEIR.

38-198

- o The US101/Broadway Interchange Project is in its final engineering phase with expectation of a 2014 construction start-up. <http://www.burlingame.org/search.aspx?request=us101%2fbroadway+interchange+project+design&maxFiles=25> page 17. Since the stipulation that Caltrain must be allowed to provide uninterrupted service during the course of Project construction (*Amendment No. 1 to Agreement* Ibid.), and with increased trains per hour at Project completion, gridlock can only be avoided on Broadway, Carolan Avenue, and California Drive with grade separation. There are less than 200 feet between the western touchdown of the US101/Broadway Overpass and the Caltrain ROW which will present great design challenges to implement grade separation that provides a smooth transition to the Overpass.

38-198

Any and all responsibility for financial incursions or liability that would fall upon the City of Burlingame with construction of any proposed grade-separated solution must be addressed in the *Draft 2012 Business Plan* if that document serves to inform the PRDPEIR.

38-199

- o Addressing the impacts of potentially moving freight tracks closer to adjacent land uses along the San Francisco Peninsula.
 - *AB1358* (SEC. 2.(h)(bid.)); and SEC. 4. Section 65302 of the Government Code is amended to read: 65302. The general plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals. The plan shall include the following elements: (f) (1) A noise element that shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources: (C) Passenger and freight on-line railroad operations and ground rapid transit systems.

Respectfully submitted,

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Response to Submission 38 (Patricia Hogan-Giorni, February 23, 2012)

38-180

As described in Section 1.4 of the 2012 Partially Revised Draft Program EIR, the Atherton 1 and Atherton 2 court rulings require the Authority to rescind its certification of the 2010 Revised Final Program EIR and to make a new decision based on this 2012 Partially Revised Final Program EIR. The 2012 Partially Revised Draft Program EIR contains the new analysis necessary to comply with the judgment of the court on all of the items listed in this comment. Based on that analysis as well as the information contained in this 2012 Partially Revised Final Program EIR, the Authority will decide whether or not to:

1. Certify this Partially Revised Final Program EIR (including the 2008 Final Program EIR and the 2010 Revised Final Program EIR) for compliance with CEQA
2. Approve findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program in compliance with CEQA
3. Approve a network alternative, preferred alignments, and preferred station locations for further study in project-level EIRs.

Please refer to Standard Response 2 regarding the procedure the Authority has followed with the Partially Revised Draft and Final Program EIRs.

38-181

While it is acknowledged that there are funding timelines that the Authority must meet, the Authority disagrees with the comment that it has rushed the public comment process in any way. The Authority has appropriately drafted and circulated the 2012 Partially Revised Draft Program EIR for public comment based on the *Atherton 1* and *Atherton 2* court rulings, in compliance with CEQA. Future certification of environmental documents, including this 2012 Partially Revised Final Program EIR, as well as the award of construction contracts following the certification of project-level

EIR/EISs, will continue to receive a high-level of examination by agency staff and decision makers, and the public, to ensure that transparent and appropriate decisions will be made. Please see Standard Response 2 on the Authority's procedures.

38-182

The Authority does not concur with the comment that the Partially Revised Draft Program EIR is fundamentally flawed because it is based on the 2010 Revised Final Program EIR and the 2008 Final Program EIR. The material in the Partially Revised Final Program EIR is not stale as the comment asserts. In addition, the Partially Revised Draft Program EIR and Partially Revised Final Program EIR have both considered whether and to what extent any assumptions or conditions discussed in the 2008 and 2010 program EIR documents may have changed in a material way.

As stated in the introduction to Chapter 5 of the 2012 Partially Revised Draft Program EIR, "new information subsequent to the Authority's September 2, 2010, decision has been considered to determine whether it has an effect on prior Program EIR analysis that would require revisions." Specifically, the "analysis has been guided by the consideration of whether the information constitutes 'significant new information' under CEQA, as guided by CEQA Guidelines, §15088.5." Chapter 5 discusses information derived from project-level work, the Altamont Corridor Rail Project, the Draft 2012 Business Plan, and provides an analysis of changes in the environmental setting. These factors were all considered in determining whether the Pacheco Pass network alternative serving San Francisco via San Jose remained the staff recommended preferred alternative.

The Authority also disagrees with the commenter's assertion that information contained within the Draft 2012 Business Plan should not be used to inform the 2012 Partially Revised Draft Program EIR. The EIR has appropriately considered both the draft and revised versions of the plan. Simply because the business plan has yet to be officially

adopted and the fact that it contains references to the social benefits of the HST system does not undermine the important role that this business plan has in defining the phasing and financing of the statewide HST system. The phasing approach of this draft business plan is different from prior business plans, last published in 2008 and 2009, and for this reason an analysis was conducted to determine whether these factors would result in different types or levels of environmental impacts than previously disclosed. Refer to Chapter 5 Partially Revised Final Program EIR for a full discussion of the Draft and Revised 2012 Business Plan.

38-183

The social benefits of the HST system are described in both the Partially Revised Final Program EIR and the Revised 2012 Business Plan. The Partially Revised Final Program EIR also describes the adverse impacts of HST in the Bay Area to Central Valley region. CEQA requires the Authority Board, in making a final decision on the first-tier project, to balance the economic, legal, social, technological, and other benefits, including regional and statewide benefits, against the unavoidable environmental risks. The social benefits and financial costs of the project are relevant considerations. The Business Plan, and its phasing approach to the statewide HST system, is also an appropriate document to consider in the revised program EIR process.

38-184

The environmental implications of the phased implementation approach for the statewide HST system in the Bay Area to Central Valley region is discussed in Chapter 5. This discussion is intended to identify the consequences of the new phasing and implementation information in the Draft 2012 Business Plan. In particular, the phasing presented in the 2012 Draft Business Plan "will result in the project taking longer to complete than previously understood. This information identifies that the benefits from an operational, fully constructed statewide HST system will accrue more slowly."

Phasing also means that impacts from constructing the end-point sections will not occur for a longer period of time. In addition, unique impacts would occur at an interim northern terminus station

with a phased approach. These impacts, including the potential for higher traffic congestion and impacts on connecting commuter rail systems are newly identified significant impacts. These differences, however, do not distinguish between the Altamont and Pacheco network alternatives. Phasing can be accomplished for both network alternatives. The unique impacts that would result from the phased approach are discussed and presented in Chapter 5 of the 2012 Partially Revised Draft Program EIR. Specific impacts related to a longer-duration implementation of the statewide system due to the phased approach would be evaluated in each project-level EIR/EIS.

38-186

The terminology in the Business Plan and how that terminology relates to terminology in Proposition 1A does not raise environmental impact issues. The Partially Revised Final Program EIR considers the Business Plan and the environmental implications of phasing, and the Authority considers this appropriate.

38-187

The financial and cost information in the Business Plan, and its relationship to the Authority's intention to use American Recovery and Reinvestment Act (ARRA) funds to build the HST system in the Central Valley, is outside the scope of this Program EIR. These are not environmental issues. The Partially Revised Final Program EIR considers the Business Plan and the environmental implications of phasing, and the Authority considers this appropriate.

38-188

Comment acknowledged. The Draft 2012 Business Plan discussed a blended system approach for an alignment between San Francisco and San Jose along the Caltrain Corridor. The Partially Revised Final Program EIR discusses the blended system approach in Chapter 5. Please refer to Standard Response 1 explaining how continued consideration of a four-track alignment for the Caltrain Corridor is consistent with CEQA.

38-189

The comment does not appear to address the Partially Revised Final Program EIR. As to increased rail service on the Peninsula, Caltrain

electrification with increased service has been the subject of prior PCJPB project environmental analysis, which analyzed the impact of electrification and 6 trains per hour, which is one train more per hour per direction than Caltrain operates today. The possibility of additional trains being HST trains would need to be evaluated as part of any future environmental analysis of the corridor. In general, blended operation on the Caltrain Corridor would have fewer impacts than the full system HST alternative that was assessed in detail because additional right-of-way would not be required, passenger volumes and associated passenger related traffic impacts at station areas would be lower, construction of a complete four-track system and its associated impacts would not have occurred, and other issues discussed in the Partially Revised Draft Program EIR would be anticipated to be less severe. Refer to Standard Response 1 and Chapter 5 in the Partially Revised Final Program EIR for more discussion of the environmental implications of blended system, including traffic.

38-190

The comment appears to suggest that the ridership forecasts in the Draft 2012 Business Plan are not reliable. This comment does not appear to be directed at the Partially Revised Draft Program EIR. Nevertheless, the ridership model used to generate ridership forecasts for the Business Plan has been peer reviewed. The peer review found the model adequate for environmental evaluations and planning purposes.

The commenter appears to misunderstand the role that population plays in the ridership model. While population does correlate directly with ridership, this does not mean that it is the only determinant of ridership. As described in the Business Plan, documents supporting the Business Plan and the extensive documentation about ridership in the 2008 Final Program EIR and the 2010 Revised Final Program EIR documents, many other factors determine forecast ridership, including the affordability of HST and specifics of each region's socioeconomic make-up.

The ridership model used to generate forecasts for the program EIR has been the subject of considerable public interest, as well as litigation. As part of the litigation challenge, the Sacramento Superior

Court concluded the ridership model is supported by substantial evidence.

Refer to Response to Comment 38-189.

The commenter misunderstands the role that population plays in the model. While population does correlate directly with ridership, this does not mean that it is the only determinant of ridership. As described in the documents cited above many other factors determine forecast ridership, including the affordability of HST and specifics of each region's socioeconomic make-up.

38-191

The Authority disagrees with the commenter's assertion that the 2004 MOU between the PCJPB and Authority prejudiced any decision on the range of alternatives considered between San Jose and San Francisco.

In the final judgment in the Atherton 1 case in 2009, the Superior Court specifically concluded that the 2008 Final Program EIR met the standard of studying a reasonable range of alternatives and also found that it presented a fair and unbiased analysis. (See the 2010 Revised Final Program EIR, Appendix A, p. 17.) The final judgment further concluded that the Authority's basis for eliminating a US 101 alternative from detailed study reasonable and supported.

The November 2011 final court rulings in the Atherton 1 and Atherton 2 cases did not find fault with the range of alternatives studied in the 2010 Revised Final Program EIR (including the 2008 Final Program EIR), and did not require additional study of alternatives. CEQA requires that an EIR study alternatives to the proposed project, or to the location of the proposed project, which are capable of reducing environmental impacts and still accomplish most project objectives. CEQA Guidelines Section 15126.6 states: "The EIR must study a reasonable range of potentially feasible alternatives, but is not required to study every alternative suggested or numerous similar alternatives that would not reduce significant environmental effects."

The Setec Ferroviaire proposal mentioned in the comment was presented to the Authority by the petitioners in the Atherton 2 case

with comments on the 2010 Revised Draft Program EIR. The information on the Setec Ferroviaire proposal was reviewed in detail and responded to in the 2010 Revised Final Program EIR:

Setec Ferroviaire Alternative

An Altamont Pass alternative is described in Exhibit C to comment letter O012, an April 25, 2010, report by Setec Ferroviaire entitled "Evaluation of an Alignment for the California High-Speed Rail Project Bay Area to Central Valley Segment." Although the Superior Court in the Town of Atherton case did not require the Authority to study further alternatives, we have carefully evaluated the proposed Altamont Pass alternative in this report. Response to comment O012-11 summarizes our observations on what we will refer to as the "Setec Alternative." The Setec Alternative described in Exhibit C involves: (1) Altamont Pass to Fremont; (2) routes through Fremont; (3) a San Jose connection from Fremont; (4) a crossing of the Bay at Dumbarton and line to a junction at Redwood City; and (5) and possible use of Highway 101 from Redwood City to South San Francisco.

The Setec Alternative makes certain trade-offs that do not offer any significant benefit above alignment and network alternatives studied as part of the 2008 Final Program EIR for Altamont. In most locations, the alignments share the same characteristics:

- There is a crossing of San Francisco Bay at Dumbarton.
- Newark and Fremont must be crossed using a rail or utility corridor
- Tunneling is required between Fremont and the I-680 corridor near Pleasanton/Sunol
- A new crossing of Altamont or Patterson Pass is made
- Tracy is crossed on/near a UPRR right-of-way (it is unclear in Exhibit C but the alignment shown on Plan 5, while it ends at I-580, it is aligned to meet the UPRR line running south of Tracy)

The alignment characteristic that differs between those studied in the 2008 Final Program EIR and Setec Alternative is how the alignments differ in their path in the area of Pleasanton and Livermore. The Authority alignment alternatives follow existing transportation corridors, either I-680 and I-580 or the UPRR. The Setec Alternative attempts to follow a powerline corridor, but that corridor is in a rural and agricultural area. The impacts and benefits of the Authority alignments in urbanized areas are traded for the Setec Alternative's impacts and benefits of a rural alignment. Evidence of some of the obvious potential impacts of Setec

Alternative's alignment has been presented above. There is no benefit that stands in favor of the entire alignment versus the Altamont alignments already considered in the 2008 Final Program EIR.

Given that the tangible differences between the Altamont alignments studied in the 2008 Final Program EIR and the Setec Alternative are small, we do not believe the Setec Alternative alters the basic comparison between Altamont Pass and Pacheco Pass network alternatives that serve both San Francisco and San Jose. We do not believe the Setec Alternative merits further consideration.

The Authority's decision not to revise and recirculate its Program EIR to include the Setec Ferroviaire alternative was challenged in litigation. The 2011 court rulings concluded the range of alternatives in the Program EIR was reasonable and that study of the Setec Ferroviaire alternative was not required under CEQA.

The 2012 Partially Revised Final Program EIR presents additional information and analysis in response to areas noted by the Superior Court as needing additional work under CEQA. Neither the court's ruling, nor the additional information in the Partially Revised Draft/Final Program EIR, results in a requirement to expand the analysis of alternatives, as the commenter suggests.

38-192

The Authority disagrees with the commenter's assertion that the selection of the Pacheco Pass Network Alternative Serving San Francisco via San Jose as the preferred alternative was somehow motivated by political or financial interests, and that as a result the 2008 Final Program EIR "should not be carried forward to inform the PRDPEIR."

The 2009 Business Plan was the subject of many public comments on the Authority's 2010 Revised Draft Program EIR. The Authority responded to concerns about the 2009 Business Plan in great detail in Standard Response 4 of the 2010 Revised Final Program EIR, Comments about the Ridership forecasts, and Standard Response 8 of the 2010 Revised Final Program EIR, The Authority's Business Plan (refer to Chapter 12 of the 2010 Revised Final Program EIR).

The rulings in the Atherton 1 and Atherton 2 cases did not find fault with the information relied upon from the 2009 Business Plan in the 2010 Revised Final Program EIR.

Furthermore, the Superior Court has held the range of alternatives in the Program EIR to be reasonable and compliant with CEQA.

38-193

The commenter asserts that the staff recommendation of the Pacheco Pass Network Alternative Serving San Francisco via San Jose as the preferred alternative has been prejudiced by reliance on Regional Rail Plan documents from the Metropolitan Transportation Commission (MTC). Chapter 2 of the 2007 Draft Program EIR and the 2008 Final Program EIR explained related transportation programs and studies in the Bay Area to Central Valley study region, including the San Francisco Bay Area Regional Rail Plan. Consideration of the Regional Rail Plan is consistent with the requirements of CEQA, which emphasizes that knowledge of the regional setting is critical to analyzing environmental impacts, and that a proposed project's consistency with regional plans must be considered.

The comment regarding MTC's priorities is noted, however, the Authority Board will make a final decision on the network alternative for the HST in the Bay Area to Central Valley study region. The position of MTC in the Regional Rail Plan is one of multiple of factors that will be considered, as reflected in Chapter 6.

As discussed in detail in Standard Response 10, Alternatives, of the 2010 Revised Final Program EIR, the program EIRs have applied consistent evaluation methods and criteria to the study area and network alternatives reviewed. The Authority has been guided by the adopted objectives and criteria for evaluation of alignment and station location options as described in Table 6-1 of the 2012 Partially Revised Draft Program EIR, and as was included in the 2005 Statewide Program EIR and the 2008 Final Program EIR. While the Authority considers public and agency input a vital part of the environmental process, the support of any one agency has not guided the selection of a preferred alternative.

38-194

Comment acknowledged. The comment does not appear to address an environmental issue.

38-195

The Partially Revised Final Program EIR is not a stale document because it is based on the 2008 Final Program EIR and the 2010 Revised Final Program EIR, as supplemented by additional work in 2012. As stated in the introduction to Chapter 5 of the 2012 Partially Revised Draft Program EIR, "new information subsequent to the Authority's September 2, 2010, decision has been considered to determine whether it has an effect on prior Program EIR analysis that would require revisions." Specifically, the "analysis has been guided by the consideration of whether the information constitutes 'significant new information' under CEQA, as guided by CEQA Guidelines, §15088.5." In other words, the EIR has considered whether new information or changed conditions would result in new significant environmental impacts, or identify new alternatives or mitigation measures that should be considered.

Chapter 5 discusses information derived from second-tier, project-level planning and environmental work, the Altamont Corridor Rail Project, the Draft and Revised 2012 Business Plan, and provides an analysis of changes in the environmental setting. These factors were all considered in determining whether any additional changes would be necessary to the prior environmental analysis in the 2008 Final Program EIR or the 2010 Revised Final Program EIR. The Partially Revised Final Program EIR provides an adequate basis for decision making at the programmatic level.

38-196

The Authority did not receive a request for traffic data from the commenter, though other parties requested and received this traffic data from the Authority. The Partially Revised Final Program EIR includes a traffic analysis to address the congestion effects of reduced access to surface streets from potential lane closures. Individual intersection effects were evaluated based on local and regional analysis criteria. For purposes of the programmatic analysis, and in light of the corridor being evaluated as a whole at the

program level, traffic impacts resulting from lane closures were considered a new significant traffic congestion impact.

The comment states that the Authority is in violation of the Complete Streets Act that ensures that transportation plans meet the needs of all users and the Authority may be opening itself up to future litigation and liability.

The comment cites several bicycle master plans for communities on the Peninsula. These bicycle plans include bicycle facilities along corridors where a potential lane reduction may occur. Any loss of transportation facilities for any mode must be assessed according to the Complete Streets Act.

The comment concludes that the Authority is placing a financial burden on the local jurisdictions to amend their plans and any removal of bicycle, pedestrian or ADA facilities by the project needs to be addressed in the 2012 Business Plan and any liability associated with this removal shall be borne by the Authority.

A more detailed level of planning is required to determine how the second-tier project design will affect bicycle movement, public transit, and pedestrians in particular communities. This will occur as second-tier projects are developed and second-tier EIR/EIS documents are prepared. At present there is no known removal of bicycle, pedestrian, or ADA facilities by the project that would not be replaced in the exact same or similar fashion.

38-197

The first-tier project that is the subject of this Partially Revised Final Program EIR does not identify potential lane closures in Burlingame. Analysis of preliminary design prepared as part of the second-tier HST project-level analysis for San Francisco to San Jose (before the project-level environmental analysis for this segment was put on hold) did examine the potential for closure of certain at-grade crossings in different locations; however, there was no proposal to close any of the existing at-grade crossings noted in the comment: Oak Grove, North Lane, Howard Avenue, or Bayswater Avenue. Design alternatives for grade separations have not been refined to a sufficient level of detail for second-tier traffic or other second-tier impacts to be analyzed. Once design alternatives are developed, the

second-tier environmental analysis will analyze impacts and if any are determined to be significant, appropriate mitigation will be developed.

38-198

The vertical alignments at Broadway considered in the Supplemental Alternatives Analysis for the San Francisco to San Jose second-tier project (before the project-level environmental analysis for this segment was put on hold) all assumed grade separation of the tracks from Broadway. One option was an elevated track alignment with Broadway remaining at its existing grade. A second option had the tracks remaining at grade and the Broadway alignment depressed beneath the tracks. The final option depressed the tracks with Broadway remaining at its existing grade. Further engineering and evaluation is needed to determine the recommended vertical alignment at this location. This work will occur as part of second-tier project planning, development and environmental review if the San Francisco to San Jose Section is part of the selected network alternative at the conclusion of this Program EIR process.

38-199

The reference in the comment to the Planning and Zoning Law requirements for a noise element in a city's general plan is acknowledged. The HST project uses federal guidelines (FTA and FRA) for analysis of noise effects at this program-level. Noise and vibration limits during construction will be established by the Authority which will consider the land use activities adjoining the construction sites. These criteria will be developed with consideration to local noise ordinances that limit the hours or noise levels of construction. Refer to Response to Comment 40-270 to this document for a discussion of how these guidelines were implemented in the program-level evaluation.

Submission 44 (William Blackwell, February 21, 2012)

3955

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02-22-12PDP:20 RCVD

February 20, 2012

Mr. Dan Richard
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Dear Mr. Richard,

Enclose for your consideration is a copy of my recent response to the CAHSRA's request for public comment on the revised DEIR that includes impacts along the San Francisco Peninsula.

44-457

I am sending it to you not only for your information but also because I would like you to persuade Governor Brown that alternative phasing and other modifications such as I suggest would result in a meaningful system in operation in the foreseeable future.

As you will see, I believe that San Jose could be the hub of rail activity in Northern California for many years to come. It is ideally situated at the junction between the South Bay and East Bay, which, coupled with its continued growth in population and regional importance assures strong ridership. With four interconnecting lines, it could in fact be a Grand Central Terminal. Note also that the I-5 route between San Jose and Los Angeles may require some curve smoothing but is otherwise relatively unencumbered by property acquisition and other problems. San Francisco, of course, will always be the center of tourist interest.

In my view, the current plan for running Caltrain and HSR on the same tracks along the San Francisco Peninsula is untenable. The plan is redundant, cuts HSR service frequency (and, hence, ridership), and depends on highly complex signal systems, track arrangements, and scheduling. The HSR trains are not isolated — any accident involving the lightweight 220-mph trains traveling at any speed could be catastrophic.

44-458

I have followed the development of CAHSR almost since inception — initially as strong supporter but later as critic when I found that much of the system planning was unsupported by creditable numbers. I mailed a copy of my comprehensive summary of the challenges facing the Authority to you in late August 2011 but to an address here in Piedmont. It wasn't returned so I assume you received it.

Sincerely,

William Blackwell

William Blackwell

2/17/12

Bay Area to Central Valley HST Partially Revised Draft Program EIR Comments

These comments, while general in nature, relate specifically to the impacts along the San Francisco Peninsula, i.e., potentially moving freight tracks closer to adjacent land uses and reducing access to surface streets from potential lane closures.

44-460

Conceptually, there would be numerous advantages in having ONE STATION IN SAN JOSE that would serve CAHSR, an electrified Caltrain, an expanded BART system, and an improved east-west ACF line. Such a station would (1) be within walking distance of hotels, (2) linked to local bus and light-rail systems (including to San Jose Airport and Silicon Valley destinations), (3) provide adequate long-term and short term parking, and (4) provide easy curb access for drop-off and pick-up of passengers with good freeway access. This would be a once-in-a-lifetime opportunity for a great railway station in Northern California.

A two-minute, cross-platform transfer would be required between rail systems, with a short up or down escalator ride. Rail transfer is far less onerous than changing planes at airports; it is very common in Switzerland and other countries; and, if coupled with high frequency service, could significantly reduce travel time and cost. Although transfers are precluded by Prop 1A (along with subsidies and several other unrealistic expectations), it was the intent of the Prop 1A legislators that every element of CAHSR be cost effective.

44-461

1. Caltrain would be fenced and electrified with some rail crossings eliminated. It would be improved entirely within the existing 50-foot ROW and mitigate the contentious Peninsula issues. Tracks would terminate in an improved station at 4th & King in downtown San Francisco with underground parking and a fast 5th Street shuttle to Powell BART Station and the heart of San Francisco.

44-462

2. A 186-mph CAHSR between San Jose and Los Angeles would use the direct I-5 route via the Pacheco (or preferably Panoche) Pass, and take less than the 2 hours 10 minutes stipulated in Prop 1A, which may not be achievable over the present route. This would be the high-speed rail system that almost everyone expects — fast, safe and efficient from somewhere to somewhere. Changing from 220-mph to 186-mph trains — as in Japan, France, and every other HSR system except China — would result in a significant cost saving without a meaningful deterioration of service. With short trains and a high frequency of service, CAHSR would be more than able to compete with airlines.

44-463

3. Altamont Commuter Express would be upgraded to 120-mph trains using tilt technology to provide an east-west route across Northern California to a gradually upgraded San Joaquin Amtrak route from Sacramento straight down to I-5, where it would join CAHSR at Wheeler Ridge and on to Los Angeles. This fast route, which might also be 120-mph, would be a quantum leap forward for Central Valley residents.

44-464

4. BART is already planned to connect to downtown San Jose in the foreseeable future, providing service to the East Bay and an alternate route to downtown San Francisco, taking some of the load off of Caltrain.

Submission 44 (William Blackwell, February 21, 2012) - Continued

44-465

All of this could be accomplished at relatively low cost with the highest priority being given to completion of the direct SJ-LA line and realization of its revenues, which would defray part of the costs for a gradual transition over the years to the complete high-speed rail system envisioned. Note also that, according to the State forecasts, it will be at least 2050 before the population of the Central Valley counties reaches that of the combined Bay Area/LA Counties, and a lot longer before the income levels needed to sustain HSR ridership are remotely comparable.

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Response to Submission 44 (William Blackwell, February 24, 2012)

44-457

Travel hazards associated with HST service was previously addressed in the 2008 Program EIR, Volume 1, Section 3.2, Travel Conditions. The analysis describes the relative safety of HST service, based on international statistics, when compared to other modes of travel.

The Partially Revised Final Program EIR, chapter 5, discusses phasing concepts for the HST system as a whole that appear to be consistent with many of commenter's suggestions. The Authority's current approach to phasing implementation of the HST system is described in the Revised 2012 Business Plan. Please also refer to Standard Response 1.

San Jose Diridon Station will most likely be a temporary northern terminal under the "Bay to Basin" step of the development of the statewide system. Under this scenario, passengers arriving from the south on the high speed train will have to transfer to a waiting Caltrain, Capitol Corridor, ACE, VTA and BART trains to complete their journey to destinations throughout the greater Bay Area and vice versa.

The Partially Revised Final Program EIR proposed a four-track, shared use configuration on the Caltrain Corridor. The Authority disagrees that the plan is redundant because HST service would provide for intercity passenger rail with limited stops, connected to the larger statewide HST system. Caltrain provides commuter rail service.

The integration of HST and Caltrain on the same corridor is a complex endeavor that will require careful planning for infrastructure improvements as part of developing a second-tier project and second-tier EIR/EIS if the Caltrain Corridor is selected as part of the preferred network alternative at the conclusion of this program EIR process.

44-458

The Authority has received your August 2011 letter and appreciates your input.

44-460

The Diridon Station is the preferred HST station location for downtown San Jose. The station would serve Caltrain, ACE Commuter Rail, Capitol Corridor Trains, Amtrak long distance trains, VTA buses and light rail, and a possible future link to BART. The design of the station will include considerations such as ease of transfers among modes.

The Partially Revised Final Program EIR, chapter 5, discusses how phasing of HST system implementation may result in San Jose serving as a temporary northern terminus station for a period of time, with travelers to San Francisco being required to transfer between systems.

44-461

The Caltrain electrification project is a separate planning and design effort being undertaken by the Peninsula Corridor Joint Powers Board (PCJPB). The existing Caltrain right-of-way varies in width and the PCJPB will evaluate in its own planning process whether this is adequate for the electrification program if this program proceeds independently of the HST project.

The comment that the existing right-of-way is 50 feet is inaccurate. Please refer to Standard Response 1 for more discussion about the blended system approach to a potential second-tier project for the San Francisco to San Jose alignment that would accomplish similar goals on the Peninsula to option suggested in the comment.

44-462

The comment suggests that the statewide HST system should travel between San Jose and Los Angeles over the Pacheco Pass or Panoche Pass, then along an Interstate 5 route. The routing of the entirety of the statewide system is beyond the scope of this current Program EIR. Nevertheless, the Authority has studied an alignment from San Jose south, over the Pacheco Pass in the current Partially Revised Final Program EIR. The Panoche Pass was eliminated from

study in the 2005 Statewide Program EIR and not carried forward for further consideration in the Bay Area to Central Valley Program EIR. (2005 Statewide HST Program EIR, p. 2-36.) The Authority studied an Interstate 5 alignment in its 2005 Statewide Program EIR, but did not select this route for further analysis in second-tier EIRs. Similarly, the Authority preliminarily considered but eliminated from detailed evaluation a steel-wheel-on-steel-rail technology option at slower speeds. (2005 Statewide HST Program EIR, p. 2-36.)

44-463

The Authority is currently partnering with the San Joaquin Regional Rail Commission, the Federal Railroad Administration, and other regional partners on an Altamont Corridor Rail Project that would provide a dedicated regional rail corridor through the Altamont Pass and Tri Valley for commuter rail purposes.

Upgrading existing UP and BNSF lines for 120 mph service operated with tilt trains would require all grade crossings be grade separated or have full barrier protection systems installed. Lines would likely need to be triple-or quad-tracked to eliminate the need for trains to diverge to a siding to let trains traveling in an opposite direction pass, or to let faster passenger trains overtake slower freight trains. This would be a significant capital and environmental cost, in addition to constructing a parallel HST line for approximately the same length in the I-5 corridor. The freight railways would also need to be fully cooperative to host the additional passenger service.

Tilt trains would do little to speed trips on the ACE corridor. While they do allow incrementally higher speeds through curves, the tight curves in Niles Canyon and portions of the Altamont Pass would not allow speeds of 125 mph. It is assumed by this responder that the 125 mph service would be diesel powered. This could lead to compatibility problems with the electrified HST service if the services are assumed to share the Central Valley to Los Angeles mountain crossing. Diesel powered trains could have problems climbing the steep and long grades possible with electrically powered HST. Tunnels would also need to be designed for safety issues arising from diesel operation, increasing their costs.

44-464

As the comment notes, San Jose Diridon Station is proposed as a station that would serve multiple transit service providers including BART, Caltrain, Capitol Corridor, High Speed Rail, and the Santa Clara Valley Transit Authority. These services will provide passengers with a variety of methods to reach different destinations in the region.

44-465

Please refer to Responses to Comments 44-457 and 44-464. Also see Standard Response 1 regarding the blended system concept.

Submission 54 (Virginia Saldich, February 21, 2012)

Bay Area to Central Valley Supplemental EIR/EIS - RECORD #54 DETAIL	
Status :	Pending
Record Date :	2/21/2012
Response Requested :	
Stakeholder Type :	CA Resident
Submission Date :	2/21/2012
Submission Method :	Project Email
First Name :	Virginia
Last Name :	Saldich
Professional Title :	
Business/Organization :	
Address :	27 Crescent Drive
County :	Santa Clara
Apt./Suite No. :	
City :	Palo Alto
State :	CA
Zip Code :	94301
Telephone :	650-323-7136
Email :	vsaldich@hotmail.com
Fax :	
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
Comment Type :	Issue (concern, suggestion, complaint)

54-428

Stakeholder Comments/Issues :

To the California High Speed Rail Authority Board:

There are several omissions in the Partially Revised Draft Program Environmental Impact Report:

First of all, you continue to leave open the possibility of a four track system up through the dense residential neighborhoods of the San Francisco Peninsula. But even if you agree to a two track system, you ignore the differential configuration of the communities along this route. In some, the residential neighborhoods are buffered from the existing CalTrain tracks by commercial development. In others, the lot sizes are such that your acknowledged "significant and unavoidable" environmental impacts affect fewer people than in other, more densely developed communities.

Palo Alto is one such densely developed community where the dense residential neighborhoods go right up to the tracks. The footprint of Palo Alto is too narrow to sustain the impact of such a large scale industrial project barreling thorough the middle of the community. When you talk about a 100 foot area of environmental impact, if a neighborhood is only 200 feet deep, you have effectively wiped out half the neighborhood with your "significant unavoidable" impacts. So your model is missing some important variables.

If the lot sizes are one acre, or one half acre, you impact fewer people than in Palo Alto where the lot sizes are one-quarter acre or less. That is another important variable that is missing in your model: the number of people affected.

You have to get to page 60 before the word "human" is used. Isn't human ecology an important variable to protect as well as the natural environment. Please develop a model that factors that in.

In the years that I have lived in Palo Alto I have been impressed with the robustness of the residential neighborhoods and the constant willingness to reinvest in the properties to keep the neighborhoods viable.

In particular, I have focussed on the Old Palo Alto neighborhood which extends from Alma Street along side the tracks to Middlefield Road—a distance of six blocks—and is bounded by Churchill Street on one side and Oregon Expressway on the southern edge—a distance of eight blocks, more or less.

I did an inventory of the addresses within those boundaries which were newly built or so substantially remodeled that they appeared to be new homes.

Then I went down to the Palo Alto Planning Department computers to verify my assumptions, and I found out that there were approximately 141 homes on the East/West streets and 167 homes on the North/South streets that were either newly built or so substantially remodeled that their "Year Built" date was effectively changed to reflect the remodel date—for a total of 308 homes in that relatively small but robust neighborhood. It is one of the most robust and sustainable neighborhoods in the city, if not the state. The Walter Hays Elementary School, at the corner of Embarcadero Road and Middlefield Road, which most of the Old Palo Alto neighborhood feeds into, was for several years the highest performing elementary school in the state according to the STAR tests.

Creeping blight caused by proximity to High Speed Rail will drive out the demographic that is willing to continually reinvest in their properties to

Submission 54 (Virginia Saldich, February 21, 2012) - Continued

54-428

keep the neighborhood viable. You seem to have no component in your model that takes account of that. You seem to assume that if the decibel level of the sound or the vibration level stops at a certain point, that is all the impact your industrial scale project will have. But if those properties are blighted, the effect will creep down the streets until you have savaged a whole neighborhood.

54-429

Where you state that the environmental effects are significant and unavoidable, I submit that they definitely significant, but avoidable. You have other route choices which would avoid some of the destruction of the dense residential neighborhoods of the Peninsula.

The original commission set up by Governor Wilson determined that the Altamont Pass route was the most advantageous. The subsequent High Speed Rail Authority Board concurred. Somewhere along the line politics and ego got involved and we now have the Pacheco Pass route funneling the project up through the dense residential neighborhoods of the Peninsula.

The Canadian pipeline developer, TransCanada, has decided to shift the controversial route of its planned oil pipeline across the US. A MOVE THAT THE COMPANY PREVIOUSLY SAID WAS IMPOSSIBLE, in order to remove objections to their project. Imagine that! Routing previously said to be impossible can be changed!

54-430

Another strategy for rendering the environmental impact of your industrial scale project through dense residential neighborhoods avoidable is to go underground. In your Partially Revised DRAFT Program Environmental Impact Report you refer to a "short tunnel" of 6 miles long. Palo Alto from the Menlo Park border to the Mountain View border along Alma Street and parallel to the tracks is 4.3 miles. Therefore, Palo Alto qualifies for a "short tunnel."

To sum up, I think it is irresponsible governance to put an industrial size project like High Speed Rail through dense residential neighborhoods creating creeping blight and destroying the quality of life carefully built up by a century of wise and judicious decision making by wise and thoughtful community leaders.

I hope that you will refine your model to take these additional insights into consideration.

Thank you

Virginia Vaughan Saldich
27 Crescent Drive
Palo Alto, CA 94301

650-323-7136
vsaldich@hotmail.com

Subscription Request/Response :
EIR Comment :
Attorney Comment :
General Viewpoint on Project (BACV) :

Yes
No

Response to Submission 54 (Virginia Saldich, February 24, 2012)

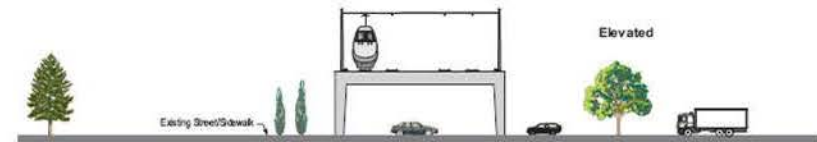
54-428

Please refer to Standard Response 1 related to the blended system approach and why the Program EIR continues to study a four-track alignment along the Caltrain Corridor between San Francisco and San Jose. The Partially Revised Final Program EIR does not ignore differences in the configuration or density of communities between San Francisco and San Jose. The text of Chapter 3.7 in the 2008 Final Program EIR described land uses along the alignment as primarily residential to the east and commercial/ services on the west. At the program level, land use, community, and property impacts were identified as significant. The 2010 Revised Final Program EIR provided additional analysis on land use compatibility and property impacts and acknowledged that a four-track alignment would require more property acquisition than originally anticipated, raising its property impact ranking from low to between low and medium. (2010 Revised Final Program EIR, Chapter 3.)

The comment appears to imply that the HST would require a new 100-foot right-of-way through Palo Alto in addition to the existing Caltrain right-of-way. This is not the case. As discussed in the 2008 Final Program EIR, the 2010 Revised Final Program EIR, and in this current Partially Revised Final Program EIR, the Authority does not propose to place the HST alignment adjacent to the Caltrain alignment. Instead, the proposed first-tier project involves an alignment that would involve an approximately 100-foot width that includes the existing Caltrain right-of-way. Within the City of Palo Alto, in the Old Palo Alto neighborhood raised by the commenter [adjacent to tracks from Alma to Middlefield, bounded by Churchill and Oregon Expressway], the existing Caltrain right-of-way varies between roughly 60 feet wide to roughly 95 feet wide. While the need for additional property would eventually depend on the configuration of the railroad and roadway grade separation, in this roughly 8 block stretch the required right-of-way would vary, dependent on location for a four-track, grade separated, permanent alignment. In this area, if additional right-of-way was needed, the railroad would be anticipated to expand towards the east into the

publicly owned Alma Street right-of-way and not towards the residences and parks that line the west side of the rail right-of-way. The railroad would most likely be either elevated or lowered so as not to affect the at-grade crossings and roadways currently crossing the Caltrain railroad. By moving the railroad up or down it eliminates the need to elevate or depress the roadways that cross the railroad. This design approach greatly reduces the need for additional right-of-way to the east or west of the Caltrain alignment to accommodate these roadway modifications. See the Figures 1 through 3 below from the San Francisco to San Jose Section Preliminary Alternatives Analysis. The HST would not "wipe out half the neighborhood" as the comment suggests.

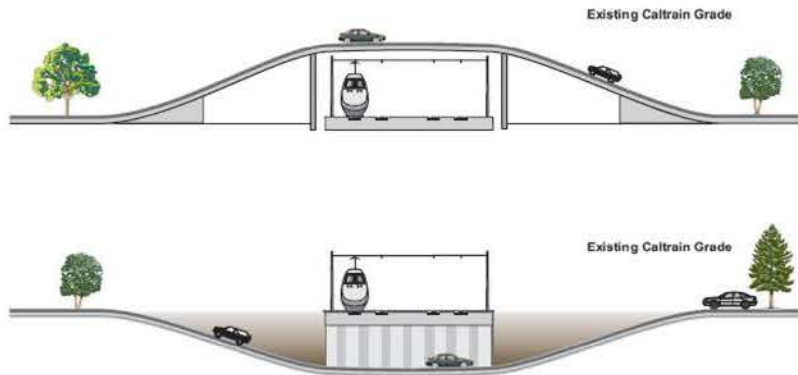
**Figure 1
Typical Section for Elevated Option**



**Figure 2
Typical Section for Below-Grade Option**



**Figure 3
Typical Sections for Existing Caltrain Grade Option with Roadways over and under the Railroad**



The Authority does not agree that the HST will create blight in Palo Alto. The Caltrain Corridor is an active commuter and freight rail corridor now, relying on diesel powered locomotives. The HST will be electrified, resulting in benefits in the areas of noise and air quality by providing an opportunity for the commuter rail service to use electric-powered locomotives as well.

54-429

The commenter appears to misunderstand the definition of significant and unavoidable impacts, as presented in the context of CEQA. Under CEQA, unavoidable significant impacts are those environmental effects that cannot be avoided if the proposed project is implemented. The Partially Revised Draft Program EIR, which includes the prior environmental analysis in the 2008 Final Program EIR and 2010 Revised Final Program EIR, evaluated multiple alternatives, each of which identified a wide variety of significant and unavoidable impacts. The Authority is using this Program EIR as part of a tiered environmental review process for its general route

decision into the Bay Area from the Central Valley. The impact analysis in the Partially Revised Final Program EIR identified other network alternatives that would avoid the Caltrain Corridor between San Francisco to San Jose or that would use only a portion. There are environmental tradeoffs between these alternatives and the preferred Pacheco Pass Network Alternative serving San Francisco via San Jose, as well as tradeoffs for the ability of these network alternatives to meet the project objectives. Please see Chapter 6 for more discussion of these tradeoffs.

The Intercity High-Speed Rail Commission, established in 1993, was tasked with evaluating the feasibility of high-speed rail and developing a 20-year high-speed intercity ground transportation plan. The comment correctly identifies that the Commission preliminarily recommended an alignment to connect the Bay Area and the Central Valley via the Altamont Pass, reaching San Francisco by crossing the Bay on a reconstructed Dumbarton Bridge. The comment also correctly identifies that subsequent work by the Authority in 1999 concluded that Altamont Pass would generally have fewer environmental impacts than the Pacheco Pass; however, the conclusion was based on the Altamont Pass area alone, without considering the impacts of crossing the San Francisco Bay at the Dumbarton Bridge to reach San Francisco. (Authority, Corridor Evaluation Final Report [1999].) Subsequent, more detailed analysis as part of the 2008 Final Program EIR has identified the environmental tradeoffs of a variety of Altamont and Pacheco network alternatives, including impacts on the San Francisco Bay from a Bay crossing.

The Authority will rescind its 2010 decision approving the Pacheco Pass network alternative serving San Francisco via San Jose. The Authority will then consider the network alternative decision afresh, in light of the whole record. The Authority will exercise its independent judgment and discretion on the network alternative. Please also refer to Standard Response 2 regarding the Authority's procedures.

54-430

Comment acknowledged. The Authority's previous decisions committed to study of vertical profile variations with the second tier

EIR. A similar commitment will be included within the staff recommendation, irrespective of the final network alternative selected, for consideration by the Authority Board

17 Response to Comments from Public Meeting

Submission 61 (Public Hearing, February 9, 2012)

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2
3
4 CALIFORNIA HIGH-SPEED RAIL AUTHORITY
5
6 PUBLIC HEARING ON
7 PARTIALLY REVISED DRAFT PROGRAM
8 ENVIRONMENTAL IMPACT REPORT
9
10
11 SAN JOSE CITY HALL
12 200 East Santa Clara Street
13 San Jose, California 95112
14
15
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18
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20 REPORTED BY: DEBORAH FUQUA, CSR #12948
21
22
23
24
25

1 APPEARANCES
2 Mr. Roelof van Ark, Chief Executive Officer
3 Mr. Thomas Richards, Vice Chairman
4
5 Mark McLoughlin, Deputy Director Environmental Planning
6 David Freytag, Consultant ICF International
7
8 I N D E X
9 Speaker Page Number
10 TONY NGUYEN..... 11
11 VIRGINIA SALDICH..... 15
12 JIM STALLMAN..... 14
13 CORWIN LAKIN..... 18
14 STEVE Van PELT..... 21
15 JERRY BROZELL..... 25
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Submission 61 (Public Hearing, February 9, 2012) - Continued

1 Thursday, February 9, 2012 4:00 o'clock p.m.
2 P R O C E E D I N G S
3 Mr. van ARK: Good afternoon. My name is
4 Roelof van Ark. I'm the chief executive officer of the
5 California High Speed Rail Authority, and I would like
6 to welcome you here to this public meeting on the Bay
7 Area Partially Revised Draft Program EIR.
8 Mr. Tom Richards will be chairing this meeting
9 today.
10 MR. RICHARDS: Good afternoon. I'm Tom Richards.
11 I'm a member of the Board of the California High Speed
12 Rail Authority. I would also like to welcome you and
13 look forward to the public comment.
14 Mark McLoughlin?
15 MR. McLOUGHLIN: Good afternoon. I'm Mark
16 McLoughlin. I'm the current deputy director of
17 environmental planning for the Authority.
18 The purpose of this meeting today is to take
19 public comment on the Partially Revised Draft Program
20 EIR, which is currently in its public review period.
21 We'll proceed today by having a brief overview of the
22 document followed by public comment.
23 We have a court reporter here today to
24 transcribe public comment. If you wish to speak,
25 please fill out a speaker card. They are at the front

1 desk as you come in. We will endeavor to call the
2 commenters in the order in which cards were received.
3 However, we may take some comments out of order if we
4 have elected officials present.
5 Each speaker will have three minutes to make
6 their comments. We ask that you identify yourself when
7 you start to speak so that the court reporter can take
8 down your name. We also ask that you speak slowly so
9 the court reporter can accurately transcribe your
10 comments.
11 We also have a Spanish translator available,
12 Mr. Edwin Rosario. I'm going to now ask him to go
13 ahead and please read these opening brief remarks in
14 Spanish and to indicate he's available to assist with
15 public comments.
16 (Mr. Rosario translates introductory remarks
17 from the English language to the Spanish
18 language)
19 MR. McLOUGHLIN: Thank you, Mr. Rosario. I'd like
20 to now introduce Mr. David Freytag, who will provide a
21 brief overview of the Partially Revised Draft Program
22 EIR.
23 MR. FREYTAG: Good afternoon. My name is David
24 Freytag. I'm here on behalf of the Authority, and I'm
25 working as a consultant to the Authority.

Submission 61 (Public Hearing, February 9, 2012) - Continued

1 The California High Speed Rail Authority is
 2 circulating the Bay Area to Central Valley Partially
 3 Revised Draft Program EIR to address the November 2011
 4 Court ruling from the Town of Atherton litigation
 5 challenging the 2010 Bay Area to Central Valley Revised
 6 Final Program EIR.

7 The Partially Revised Draft Program EIR
 8 addresses five areas that the Court identified as
 9 needing additional work to comply with CEQA.

10 These areas include:

11 One, a revised discussion of noise and
 12 vibration effects of shifting the stretch of Monterey
 13 Highway between San Jose and Gilroy and the potential
 14 for moving freight rail activity closer to adjacent
 15 land uses in some locations along the San Francisco
 16 Peninsula and south of San Jose between Tamien and
 17 Lick, potentially placing freight tracks closer to
 18 adjacent land uses.

19 Two, a revised discussion of traffic and
 20 circulation impacts on surrounding local streets
 21 resulting from the lane reduction on the stretch of
 22 Monterey Highway between San Jose and Gilroy and
 23 resulting from lane closures on adjacent parallel
 24 streets in some locations along the San Francisco
 25 Peninsula. Additional analysis is also provided for

1 the potential loss of traffic lanes along the
 2 Oakland-San Jose corridor in the city of Hayward.

3 Three, a revised construction impacts analysis
 4 to clarify the construction impacts anticipated with
 5 the adjustments to Monterey Highway and movement of
 6 tracks in an active rail corridor.

7 Four, an assessment of new information and
 8 changed conditions since the Authority's September 2nd,
 9 2010 Revised Final Program EIR decisions.

10 And finally, a discussion of how the revised
 11 and new information affects the prior staff
 12 recommendations of the Pacheco Pass network alternative
 13 serving San Francisco via San Jose as the preferred
 14 alternative.

15 The analysis in the document leads to several
 16 conclusions.

17 One, consistent with the 2008 Final Program
 18 EIR, the project would result in significant noise and
 19 vibration impacts. Noise and vibration impacts
 20 associated with the shift of Monterey Highway would
 21 result in a separate significant impact.

22 Two, the traffic impacts of potential lane
 23 loss in the peninsula and the city of Hayward and on
 24 Monterey Highway and surrounding roadways would result
 25 in significant impacts.

Submission 61 (Public Hearing, February 9, 2012) - Continued

1 Three, construction impacts from adjustments
 2 to Monterey Highway and movement of the tracks in an
 3 active rail corridor would result in significant
 4 impact.

5 Four, traffic impacts at interim terminus
 6 stations under a phased high speed train implementation
 7 for the Altamont or Pacheco Pass network alternatives
 8 would be significant.

9 Five, impacts to connecting commuter rail
 10 service for high speed train riders boarding at interim
 11 terminus stations under a phased high speed train
 12 implementation for the Altamont or Pacheco Pass network
 13 alternatives would be significant.

14 And, finally, impacts from grade separations
 15 across all alignment and network alternatives would be
 16 significant.

17 The Authority is making the Partially Revised
 18 Draft Program EIR available to the public as part of
 19 the official 45-day CEQA public comment period. This
 20 occurs from January 6, 2012 through the close of
 21 business on February 21st, 2012.

22 The Authority filed a notice of completion per
 23 CEQA with the State Clearinghouse on January 5th,
 24 posted a notice of availability with nine county clerks
 25 on January 5th and verified that those were posted on

1 January 6th, posted the Partially Revised EIR, English
 2 and Spanish versions of the notice and library
 3 locations to the Authority Web site on January 5th.

4 The Authority distributed hard copies and over
 5 360 CDs of the Partially Revised EIR to federal and
 6 state agencies, elected officials, Native American
 7 groups and prior commenters.

8 The Authority published the notice of
 9 availability in 11 newspapers. The Authority made the
 10 Partially Revised Program Draft EIR available at 16
 11 libraries throughout the corridor. Notices were mailed
 12 to over 4,000 people, and an e-mail to over 20,000
 13 recipients was sent out with the notice of
 14 availability. And these 20,000 recipients were
 15 included in the project mailing list.

16 This public meeting is being held to receive
 17 comments of the Partially Revised Draft Program EIR.
 18 Comments can also be provided to the Authority by mail
 19 or e-mail or through the Authority's Web site.

20 There are comment cards provided at the
 21 sign-in desk, as Mark noted, here at the public
 22 meeting. And laptop computers are also set up in here
 23 downstairs if you want to make your comments in that
 24 fashion.

25 Your input is very important to us and will

Submission 61 (Public Hearing, February 9, 2012) - Continued

1 help us continue developing the California High Speed
 2 Train project. Your comments are very important and
 3 are being recorded. They will become part of the
 4 official record for the Bay Area to Central Valley
 5 Partially Revised Draft Program EIR.

6 Comments will be included in a Partially
 7 Revised Final Program EIR. This document will be made
 8 publicly available and will be taken to the Authority
 9 Board along with the 2010 Revised Final Program EIR and
 10 the 2008 Final Program EIR in determining whether to
 11 certify the Partially Revised Final Program EIR,
 12 approve findings of fact, a statement of overriding
 13 consideration, and a mitigation, monitoring and
 14 reporting program and approve a network alternative,
 15 preferred alignments and preferred station locations
 16 for the further study in the project-level EIRs.

17 Thank you.

18 MR. RICHARDS: Thank you, David.

19 We will now move to the public comment. As
 20 Mr. McLoughlin indicated earlier, each person who
 21 wishes to provide a comment will have three minutes.
 22 We will let you know when you have 30 seconds left.

23 Also, we are here to listen to your comments
 24 today. We will not be responding to your comments
 25 during this public meeting. This is a formal

1 environmental process, and our job today is to listen
 2 and record your testimony.

3 Is there anyone in the audience at this point
 4 who wishes to present public comment?

5 (No response)

6 MR. RICHARDS: Seeing none, we are going to recess
 7 for 15 minutes. And we will return at 25 minutes
 8 after. It's 10 minutes after 4:00 o'clock right now.

9 Thank you.

10 (Recess taken)

11 MR. RICHARDS: Good afternoon, ladies and
 12 gentlemen. The public meeting for the Bay Area to
 13 Central Valley Partially Revised Draft EIR is back in
 14 session.

15 The basic rules this afternoon again are that
 16 we are here to listen to your testimony and hear your
 17 comments. We are not here to respond. This is a
 18 formal environmental process. And our job today, as I
 19 just mentioned, is simply to listen and to record your
 20 testimony.

21 Beyond that, the rules are that you have three
 22 minutes to speak. We will let you know when you have
 23 30 seconds left. And we will now call -- I hope I'm
 24 saying this right, Tony -- Tony Nguyen, N-G-U-Y-E-N.

25 TONY NGUYEN: Sorry to throw such a fuss.

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-435

1 MR. RICHARDS: Welcome. Thank you.

2 TONY NGUYEN: Hi, I'm Tony Nguyen. I live in
 3 District 2, and I live up on the corner of Monterey and
 4 Branham, literally on the train corridor. It's a
 5 five-minute walk away for me. And because of that, I
 6 got interested in the High-Speed Rail.

7 And over the past nine months or so, I've been
 8 showing up to these meetings and following along, so
 9 I'm not speaking out of the blue. Overall, I think
 10 that, if you can keep the noise down to what I hear
 11 right now, things should be fine. I've gotten used to
 12 the train that honks its horn every 12 minutes or so.

13 I live right underneath the air corridor,
 14 which is booming with planes until about 10:00 or 11:00
 15 o'clock at night. And as long as you keep to the
 16 curfews, keep to the current noise level, that should
 17 be fine.

18 I think you guys should use the opportunity
 19 beautify that corridor. Right now, that corridor is a
 20 dump. I mean, literally, there are people dumping
 21 stuff there. One side of the corridor, the lighting is
 22 really bad. There's no sidewalk. It's scary as heck
 23 to walk down the street. And I hope you use the
 24 opportunity make that a safer place, better for bikes
 25 and a better place overall.

61-436

61-437

1 I think that the High Speed Rail should be
 2 done. I hear the detractors. And the biggest fear I
 3 hear from people is, "Why is it so expensive? A
 4 hundred billion dollars?"

5 From the folks that are for it, what I would
 6 like to hear is, hey, \$100 billion in contrast to what?
 7 I know that right now the price of gas and oil is about
 8 four or five bucks a gallon, and 10, 15 years from now,
 9 what will it be? I don't know.

10 And maybe the full carbon costs will be built
 11 into the plane ticket by that point in time. By the
 12 way, all those justifications should be thrown out here
 13 to the public so that it would be easier to vet the
 14 High Speed Rail project as a whole.

15 Those are my general comments.

16 I was really surprised about this meeting
 17 because I was hoping there'd be maps. I was hoping
 18 that you would actually go summarize that thick
 19 environmental report that came out. I'm not an expert,
 20 so it would have been nice having some discussion
 21 amongst the experts saying, "What is that? What's that
 22 mean?"

23 As a lay person, I was hoping to be educated.
 24 But lo and behold, I showed up 15 minutes late, and
 25 there's nothing here. So my first thought was, "This

61-438

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-438

1 is bullshit."
 2 So that's my general comments about the
 3 meeting. I was hoping that there would be some
 4 presentation material.
 5 I don't know what else to say. The project as
 6 a whole, I'm for it. I hope it goes forward. And I
 7 support you in that sense. But I think this meeting
 8 itself could have had more substance to it.
 9 Thank you very much.

61-439

10 MR. RICHARDS: Thank you, Mr. Nguyen.
 11 Do we have anyone else here who would like to
 12 make a public comment?
 13 Thank you. Can we --
 14 Thank you. Jim Stallman?
 15 JIM STALLMAN: Yes.
 16 MR. RICHARDS: Please go ahead.

61-440

17 JIM STALLMAN: I'm Jim Stallman. I live in
 18 Saratoga. And I submitted a comment to the first EIR
 19 asking that further -- well, at least costs be
 20 generated for the Altamont-straight-across-the-bay --
 21 possibly picking up both airports -- alternative
 22 routing be evaluated.
 23 And this revised EIR, of course, didn't speak
 24 to that. My comment was answered, of course, but
 25 there's still no cost estimate.

61-441

1 I think some people -- well, the first EIR
 2 said going across at Don Edwards was prohibitive from
 3 an environmental disruption standpoint.
 4 I grew up when BART was created. And we
 5 put -- we dug trenches and stuck tubes across the bay
 6 before. BART probably needs a third one at this point
 7 anyway. But, you know, you can do it. We went to the
 8 moon 40 years ago too. And it's not -- you know, we
 9 know we can go across the bay with a tube.

10 And San Francisco Airport's biggest potential
 11 trip generator, especially if there's disruptions due
 12 to -- you know, climate change might introduce more
 13 fog, or we have a terrorist attack that shuts down the
 14 airlines for three days. You know, part of the reason
 15 the ferry system is fully funded is as emergency
 16 fallback for when bridges collapse in an earthquake.

17 So here we have a potential to put High Speed
 18 Rail conduit that would actually gain ridership by
 19 serving airports even if there weren't catastrophes or
 20 disruptions of other sorts. And I don't think it's
 21 been given a due -- due study in terms of the cost in
 22 going up against the other alternatives.

23 The only way that might segue to the Revised
 24 EIR that's being presented here, I guess, would be if
 25 the train did go across the bay further up, then it

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-441

1 wouldn't be going up the peninsula in the lower end,
 2 and you wouldn't have noise due to it. So maybe that's
 3 the connection. That's my concern.

4 I don't think it was ever treated well in the
 5 first EIR. And it could be a game changer to actually
 6 get some genuine ridership for this train and make it
 7 happen as opposed to trying to sell something that
 8 people don't believe in because of how its routing --
 9 how the routing has been decided upon.

10 Thank you.

11 MR. RICHARDS: Thank you, Mr. Stallman.
 12 Ms. Virginia Saldich, please.

13 VIRGINIA SALDICH: I'm Virginia Saldich. I'm a
 14 37-year resident of Palo Alto. And I've watched a lot
 15 of changes over the years.

16 I've read the 117 pages of whatever it is, of
 17 the Revised -- Partially Revised Draft. And several
 18 things bother me.

19 First of all, you have to get to Page 60, I
 20 think, before the word "human issues." I'm a little
 21 tired about worrying about the animals. But humans
 22 don't get worried about. The human ecology -- aren't
 23 we part of the environment?

24 The 100-foot-area impact doesn't capture the
 25 concept of what I call creeping light and the

61-443

61-443

1 percentage of the dense residential neighborhoods it
 2 would affect.

3 First of all, if the residential neighborhood
 4 is only 200 feet, 100 feet is 50 percent of that
 5 neighborhood that you would be impacting. And an
 6 earlier document -- I've been following this for about
 7 two years.

8 In an earlier document, you included the area
 9 from Alma east to Middlefield in Palo Alto as the area
 10 of environmental impact. And I think that that is the
 11 area that I've done an inventory of the housing that's
 12 been built over the last several years -- six blocks
 13 from Alma to Middlefield and about six or seven blocks
 14 from Churchill to Oregon.

15 And when I moved to Palo Alto, the last couple
 16 of blocks west to Alma were kind of marginal. And in
 17 the last several, years there's been so much new
 18 development. And I did an inventory of the houses just
 19 on the east-west streets. And to my real amazement,
 20 there were 141 either new homes or homes that had been
 21 so significantly upgraded that they were considered to
 22 have -- their build date was restarted.

23 And also somewhere in your document you say
 24 that six miles is a short tunnel. Palo Alto from
 25 border to border, from Menlo Park to Mountain View

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-443

1 along Alma, is 4.3 miles. So a short tunnel would be
2 possible for you so that you could change significant
3 and unavoidable impact to -- a tunnel would make them
4 avoidable.

61-444

5 And creeping light is never acknowledged. The
6 creeping light is never acknowledged. If your impact
7 just, you know, eviscerates one block, then the next
8 block is going to fall as a result of that. So I just
9 think that, you know, you never would have had so much
10 scrutiny if you hadn't been so brutal about the route
11 you chose.

12 Thank you.

13 MR. RICHARDS: Thank you, Ms. Saldich.

14 Are there any other members in the public who
15 would like to make a comment?

16 (No response)

17 MR. RICHARDS: Seeing none, we will go into
18 recess, and we will reconvene again at 15 minutes
19 before 5:00. That's about 12 minutes, thank you.

20 (Recess taken)

21 MR. RICHARDS: The public meeting for the Bay
22 Area Central Valley Partially Revised Draft EIR is back
23 in session. The rules again, just very quickly, is
24 that this is a public hearing. Today we'll not be
25 responding to your comments, rather we will be here to

17

1 listen and record your testimony. This is a formal
2 environmental process.

3 You will have three minutes to speak. When
4 there's 30 seconds left, you will be notified by the
5 gentleman here on your left, who will put a message up
6 to you that you'll be able to see on an orange card.

7 At this point, Mr. Corwin Lakin, please.

8 Welcome, sir.

61-445

9 CORWIN LAKIN: Yes. I would like to make a
10 statement in favor of the High Speed Rail from San
11 Francisco to Los Angeles. And my comment is kind of
12 let's just do it. And if there's more environmental
13 problems, then let's get it over with and start this
14 project as commissioned.

61-446

15 And I would like to say that, if there are --
16 there's objections because of the cost, then we should
17 go ahead and do it anyway. And when we run out of
18 funds, then just stop.

19 So that's my comment.

20 MR. RICHARDS: Thank you very much, Mr. Lakin.
21 Thank you for coming down.

22 Are there any other members of the public who
23 would like to make a public comment?

24 (No response)

25 MR. RICHARDS: Seeing none, we will recess this

18

Submission 61 (Public Hearing, February 9, 2012) - Continued

1 public meeting until 5:00 o'clock. Thank you.
 2 (Recess taken)
 3 MR. RICHARDS: Good afternoon. This is the public
 4 meeting for the Bay Area to Central Valley Partially
 5 Revised Draft EIR.
 6 Are there any members of the public who would
 7 like to make a comment?
 8 (No response)
 9 MR. RICHARDS: All right. Seeing none, we will
 10 recess. And we will reconvene at 5:15. Thank you.
 11 (Recess taken)
 12 MR. RICHARDS: Good afternoon. This is the public
 13 meeting on the Bay Area to Central Valley Partially
 14 Revised Draft EIR.
 15 Is there anyone in the audience who would like
 16 to make a public comment?
 17 (No response)
 18 MR. RICHARDS: Seeing none, we will recess the
 19 meeting until 5:30, thank you.
 20 (Recess taken)
 21 MR. RICHARDS: Good afternoon. This is the public
 22 meeting for the Bay Area to Central Valley Partially
 23 Revised Draft EIR. Is there anyone of the public who
 24 would like to make a comment?
 25 (No response)

61-447

1 MR. RICHARDS: All right. Seeing none, we will
 2 recess until 5:45. Thank you.
 3 (Recess taken)
 4 MR. RICHARDS: Good afternoon. This is a public
 5 meeting for the Bay Area to Central Valley Partially
 6 Revised Draft EIR. Each speaker this afternoon will
 7 have three minutes to present their comment, and we'll
 8 give you notice when you have 30 seconds left.
 9 This is a formal environmental process, and
 10 our job today is to listen and record your testimony.
 11 We will not be responding to your comments. And we
 12 appreciate you being here.
 13 Mr. Steve Van Pelt?
 14 Good afternoon, sir.
 15 STEVE VAN PELT: Thank you for the opportunity to
 16 make my comments.
 17 Basically, I want to say some things about the
 18 alignment. I'm a real fan of high-speed rail, ridden
 19 many of the different systems in Europe, including one
 20 that could be viewed as a blended system, the TGV that
 21 starts off in Paris at high speed and ends up at Milan,
 22 crawling along at 20 miles an hour.
 23 I am definitely in favor of the Pacheco right
 24 of way. But frankly, only true express trains can
 25 bypass San Jose. It's still not clear to me what's

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-447

1 intended. And a lot of my comments, I'm afraid, are
 2 probably only going to be answered later in the
 3 project. But I want to get some of my concerns laid
 4 out here.

5 I'm a little concerned about what the blended
 6 system will be. It's really only out there on the
 7 table that I recognized why it may be having such a
 8 problem. There just is a voluminous amount of data out
 9 there. And it's really incumbent upon the Authority, I
 10 think, to be able to put forth information so that all
 11 of us can really understand this.

12 My biggest concern is I'm a resident of
 13 Menlo Park, right in the middle of the peninsula. I'm
 14 afraid the blended system will just continue to
 15 postpone the building of grade separations that have
 16 been recognized as being needed for decades now. It's
 17 getting to the point where it's almost criminal because
 18 traffic is increasing; we're going to be having a lot
 19 more accidents, et cetera -- that this will continue
 20 creating the time tables that we have on CalTrain that
 21 only a scheduler could love.

22 An actual example is, last Tuesday, I had to
 23 take the car in for service. So my normal 20-minute
 24 drive turned into a two-hour transit adventure using
 25 CalTrain, VTA light rail and VTA bus. I'm not going to

61-447

1 do that again. I'll find a different dealer.

2 These are things I'm really hoping you could
 3 address. And that's not just looking at what
 4 High-Speed Rail will do or what the tracks will do.
 5 It's really looking at transportation as a whole here
 6 in the Bay Area.

7 I'm really for a system, if it is going to be
 8 blended, where we could have 10-minute-headway local
 9 trains and 20-minute-headway express trains at peak
 10 hours.

11 I'm an engineer. I think that means we have
 12 to have at least four tracks everywhere, and we have to
 13 have grade separations. Let me just leave it at that.

14 So I'm really hoping, going forward, that you
 15 can do a job of really expressing to me how we can
 16 solve those problems.

17 And I think the really compelling problem
 18 right now for a lot of the neighbors next to tracks is
 19 noise. And we really haven't started to address what
 20 will be done about that, I realize, but there's really
 21 no reason in my mind why the improved electric
 22 technology of the new system won't in fact be quieter
 23 than what we have now. Thank you.

24 MR. RICHARDS: Mr. Van Pelt, thank you very much
 25 for your comments.

Submission 61 (Public Hearing, February 9, 2012) - Continued

1 Are there any other members of the public who
2 would like to make a comment?
3 (No response)
4 MR. RICHARDS: Seeing none, we'll recess this
5 public meeting until 6:00 o'clock. Thank you.
6 (Recess taken)
7 MR. RICHARDS: Good evening. This is the public
8 meeting for the Bay Area to Central Valley Partially
9 Revised Draft Program EIR.
10 Is there anyone who would like to make a
11 comment?
12 (No response)
13 MR. RICHARDS: Seeing none, we will recess until
14 6:15. Thank you.
15 (Recess taken)
16 MR. RICHARDS: Good evening. This is the public
17 meeting for the Bay Area to Central Valley Partially
18 Revised Draft Program EIR. Is there anybody in the
19 audience who would like to make public comment?
20 (No response)
21 MR. RICHARDS: Seeing none, we will recess and
22 reconvene at 6:30. Thank you.
23 (Recess taken)
24 MR. RICHARDS: Good evening. This is the public
25 meeting for the Bay Area to Central Valley Revised

1 Draft EIR. Is there anyone in the audience who would
2 like to make a public comment?
3 (No response)
4 MR. RICHARDS: Seeing none, the meeting will be
5 recessed until 6:45. Thank you.
6 (Recess taken)
7 MR. RICHARDS: Good evening. This is the public
8 meeting for the Bay Area to Central Valley Partially
9 Revised Draft EIR.
10 Public testimony is solicited, and what you
11 will have is three minutes to speak. And when you have
12 30 seconds left, there's a gentleman on your left who
13 will hold up an orange sheet which will indicate 30
14 seconds.
15 This is a formal environmental process, and
16 our job this evening is to take or to record your
17 testimony and to listen. We are not here to respond to
18 your comments during the public meeting.
19 And I'm Tom Richards.
20 This is Mr. Roelof van Ark. He is the CEO of
21 the California High-Speed Rail Authority.
22 And Mr. Jerry Brozell, welcome, sir.
23 JERRY BROZELL: Okay. I have a hearing aid on,
24 and there's a big echo in here. So everything you said
25 came through double and overlapped.

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-453

1 MR. RICHARDS: Sorry.

2 JERRY BROZELL: But I don't know how much time I

3 have. Sometimes they have a clock.

4 MR. RICHARDS: Three minutes. And he'll let you

5 know when you have 30 seconds.

6 JERRY BROZELL: Oh, okay. I've come to some of

7 your meetings before in different locations and all

8 that. And I'm in favor of High-Speed Rail. And I've

9 told people it's on my bucket list. I hope to ride it

10 some day before I kick the bucket. And it seems to be

11 dragging on and on forever for one reason or another.

12 When I was in the Army 50 years ago, I rode

13 the Japanese Bullet. And I thought maybe 10, 15, 20

14 years we'll get something like that in the United

15 States. Well, here we are 50 years later, and we're

16 still kicking everything around.

17 I was in Shanghai two years before the

18 Olympics, and I rode the Maglev thing over there. And

19 I keep getting dumfounded on how we're falling so far

20 behind in the United States.

21 I've used trains all over the world, public

22 transportation everywhere. I have two trucks and a

23 motorcycle, so I incorporate all this together.

24 But I want the High-Speed Rail. And it's just

25 like -- I've taken the Amtrak train from San Jose to

61-454

1 Los Angeles. And I've asked people, "Well, how long do

2 you think it takes?"

3 How long do you think it takes?

4 UNIDENTIFIED SPEAKER: I have no idea.

5 JERRY BROZELL: No idea?

6 That's the part that irritates me. The

7 majority of people I ask have no idea. I asked a city

8 planner in Santa Clara earlier today.

9 She said, "Oh, maybe seven or eight hours."

10 Do you know how long it takes by train from

11 San Jose to Los Angeles? It's a beautiful ride. They

12 call it the Coast Starlight. You ride along the ocean.

13 You see the beach, the waves. It's beautiful. I like

14 it.

15 It takes 11 hours. In all of the discussion

16 of High-Speed Rail, I have never seen a reference

17 anyplace as to how long it currently takes the train to

18 go from San Jose to Los Angeles. And next to that, if

19 you put up your High-Speed Rail figures that you use on

20 your Web page and other places, "How long do you think

21 it will take High-Speed Rail to go from San Jose to Los

22 Angeles? Two hours and 10 minutes." But yet none of

23 the people working with High-Speed Rail use the little

24 bits of information like that to get the public at

25 least thinking, "Okay. It's an improvement." I would

Submission 61 (Public Hearing, February 9, 2012) - Continued

61-454

1 hope so.

2 I didn't keep track of my time, but that's

3 most of time my thoughts in reference to it.

4 Now, I get frustrated when I hear people talk

5 negatively about these things without any real

6 information to back up what they're saying, whether

7 it's in reference to sound or noise or something like

8 that. And I tell people, well, it's as quiet as a

9 Prius.

10 And then I say why don't people with the

11 High-Speed Rail say that?

12 And they say, "Well, we can't say that because

13 we don't have the statistics or the facts to back it

14 up."

15 But it is quieter. I live within 700 feet of

16 the right of way of the current CalTrain set-up. I'm

17 in favor of it, but you would think everybody would be

18 against it by everything that you read.

19 So keep up the good work; that's all I can

20 say.

21 MR. RICHARDS: Thank you Mr. Brozell. Is there

22 anyone else in the audience who would like to make a

23 public comment?

24 (No response)

25 MR. RICHARDS: Seeing none, we're going to recess.

1 And we will reconvene at any time someone comes in from

2 the public who would like to make a comment. In the

3 absence of that occurrence, we will reconvene

4 at 7:00 p.m. Thank you.

5 (Recess taken)

6 MR. RICHARDS: Good evening. This is a public

7 meeting for the Bay Area to Central Valley Partially

8 Revised Draft Program EIR.

9 Is there anyone in the public or in the

10 audience who would like to make any public comment?

11 Seeing none, it is 7:00 o'clock. This hearing

12 or this meeting was scheduled from 4:00 p.m.

13 to 7:00 p.m.

14 Jessica from Department of Justice, thank you

15 very much for being here and for your guidance and for

16 all of our consultants.

17 Senior Rosario, you very much.

18 And Court Reporter, thank you.

19 This meeting is adjourned.

20 Thank you very much.

21 (Whereupon, the proceedings concluded

22 at 7:00 p.m.)

23

24

25

Submission 61 (Public Hearing, February 9, 2012) - Continued

1 STATE OF CALIFORNIA)
2 COUNTY OF MARIN) ss.
3 I, DEBORAH FUQUA, a Certified Shorthand
4 Reporter of the State of California, duly authorized to
5 administer oaths pursuant to Section 8211 of the
6 California Code of Civil Procedure, do hereby certify
7 that the foregoing proceedings were reported by me, a
8 disinterested person, and thereafter transcribed under
9 my direction into typewriting and is a true and correct
10 transcription of said proceedings.
11 I further certify that I am not of counsel or
12 attorney for either or any of the parties in the
13 foregoing proceeding and caption named, nor in any way
14 interested in the outcome of the cause named in said
15 caption.
16 Dated the 20th day of February, 2012.
17
18
19 DEBORAH FUQUA
20 CSR NO. 12948
21
22
23
24
25

Response to Submission 61 (Public Hearing, February 24, 2012)

61-435

Comment noted. The project EIR/EIS will apply the current FRA noise criteria and determine level of impact. Where significant impact is predicted to occur, noise mitigation will be evaluated and implemented where warranted under the FRA guidelines. A major change in the noise environment along the San Francisco to San Jose Corridor will be the elimination of train horns for the grade separated system and the elimination of diesel locomotives if Caltrain electrification proceeds. Even with these improvements, where noise impacts are projected to occur, noise mitigation such as soundwalls may be implemented.

61-436

Comment acknowledged. Aesthetics and visual impacts were analyzed in Chapter 3.9 of the 2008 Final Program EIR. In some instances, implementation of the HST may improve the visual character of an area. The visual design guidelines for the City of San Jose include examples of aesthetic treatment options.

61-437

Comment acknowledged.

61-438

Comment acknowledged.

61-439

Comment of support acknowledged.

61-440

The comment concerns a HST project alternative using an Altamont alignment, which is distinct and different than the Altamont Corridor Rail Project. The Bay Area to Central Valley HST Final Program EIR / EIS (2008) considered an alignment across the bay in the Dumbarton Corridor. Depending on the particular alignment chosen and the crossing structure (a low bridge, high bridge, or tube), the crossing was estimated to range in cost between \$1.53 billion and \$3.09 billion (p. 7-125).

61-441

An alignment combining an Altamont Pass crossing with stations at both the Oakland International Airport and San Francisco International Airport face many challenges. A direct alignment from the Livermore area at the west side of the Altamont Pass towards the inner East Bay would most likely utilize the I-580 corridor. A previous comment suggested replacing BART in the I-580 corridor with HST. Please refer to Response to Comment 56-115 for a discussion of that proposal. It is likely that HST would continue west from the I-238/I-580 corridor on an elevated structure following I-238 and then I-880 through San Leandro. The line would then likely turn west in the vicinity of Davis Street, requiring acquisition of developed properties. To access the airport, the HST would likely drop into a tunnel, excavated in poor soil conditions, before requiring a very large excavation for the airport station with a four-track arrangement to allow non-stop trains to bypass the station platforms. This would likely require relocation of a significant portion of the airport's surface parking lot.

The bay is widest at the point between the two airports, approximately ten miles. A completely tunneled crossing beneath the Bay and wetlands at Dumbarton is only 5 to 6 miles. Because of the width, a connection between the two airports is the most expensive place to cross the bay.

Once at San Francisco International Airport, the tunneling would need to continue another mile or so beneath the runways and tarmac until a suitable location for an excavated station, likely somewhere north of the current terminals. From there, more tunneling would connect the HST with the Caltrain line, somewhere in the vicinity of San Bruno.

The length of tunneling to cross the bay and the disruption to existing properties to reach the airports make a HST line connecting the two airports a very unlikely solution to implementing HST in the Bay Area.

61-443

The public meeting record indicates “creeping light” which was identified to be an error in the record given that the commenter also provided a written comment (54-428) that discusses “creeping blight”. Refer to Response to Comment 54-428.

61-444

Refer to Response to Comment 54-428

61-445

Comment of support acknowledged.

61-446

Historically, federal funds have supported approximately 50% to 80% of many major transportation investments, including highway, transit, and aviation sector-related projects. This means although California’s HST program is much larger than most transportation projects, there is precedent for substantial federal support for large and nationally significant transportation projects.

California has been extremely successful in winning federal HST grants, obtaining close to 40% of the approximately \$10 billion of federal High-Speed and Intercity Passenger Rail grant funds. This initial federal funding allows California to move forward with the first step in the HST program. The first construction to occur is in the Central Valley, which will be fully funded upon appropriation of state bond funds to match federal grants, becomes the platform for expansion into the IOS—the first HST service in California and the nation.

The Passenger Rail Investment and Improvement Act (PRIIA) of 2008 (www.fra.dot.gov/downloads/PRIIA%20Overview%20031009.pdf) established the framework for the national high-speed rail and intercity passenger rail program. In February 2009, President Obama signed the American Recovery and Reinvestment Act (ARRA). Using PRIIA as a framework, Congress appropriated through ARRA an investment of \$8 billion for new high-speed and intercity passenger rail grants.

Congress continued to build upon this ARRA funding by making available, through the Fiscal Year 2010 Appropriations, an additional

\$2.1 billion, bringing the total program funding to \$10.1 billion. In 2011 Congress rescinded \$400 million of that FY 10 funding. As a result, California’s HST program has received \$3.5 billion or 34% of these federal funding sources. Of this amount, slightly more than \$3.3 billion is committed to the first construction in the Central Valley. This, combined with funding from Proposition 1A, would provide the estimated \$6 billion needed for the first construction.

The High-Speed Intercity Passenger Rail Program has been the single largest source of federal grant funding for high-speed rail. The program was developed to provide funding to new or improved high-speed or intercity passenger rail service. These project grants have the effect of delivering transportation, economic recovery, livable communities, and certain project success factors.

61-447

Comment acknowledged. Refer to Standard Response 1 for a discussion of the blended system and phasing approach proposed for the Peninsula. The comment is correct that in general, electrified trainsets travelling at 125 mph will be quieter than the diesel locomotives and passenger cars that travel the Caltrain Corridor currently.

61-453

Comment of support acknowledged.

61-454

Comment acknowledged.

61-455

Comment acknowledged.

Submission 68 (Tony Nguyen, February 9, 2012)

My name is Tony Nguyen.

68-496

I live in District 2, along the train and air plane corridor, on the corner of Monterrey and Branham. I can live with that level of noise and can live with something comparable in the future. We should take advantage of the project to beautify Monterrey. Right now it is a dump. The streets are bike unfriendly. There aren't enough street lights, so walking down that street is really scary. We can use the HSR to improve the street conditions.

I think we should have started building the HSR 20 years ago. I can't call myself the tech capital of the world, when Europe, Japan and China have advanced rail technology and we do not. It would make a huge impact today reducing the carbon footprint of traveling in California. I am not a physicist, but I know it takes a lot more energy to fly a ton of stuff, then to send it by train, because you don't have to lift the entire train into the sky.

I do not think the HSR will cost too much, if we add the full carbon cost to gasoline and jet-fuel. This will be clearer in the future, when the price of oil rises, the carbon market develops and when we price in all of the fracking costs.

Support HSR.

Response to Submission 68 (Tony Nguyen, March 5, 2012)

68-496

Comment of support acknowledged. Please also refer to Response to Comment 61-435.

18 Sources Used in Response to Comments

18 SOURCES USED IN RESPONSE TO COMMENTS

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12 STANDARD RESPONSES TO FREQUENTLY RAISED COMMENTS

As part of the public review process from March 11, 2010, to April 26, 2010, for the March 2010 Revised Draft Program Environmental Impact Report Material (2010 Revised Draft Program EIR), the High-Speed Rail Authority (Authority) received over 540 comment letters containing more than 3,750 individual comments. Some comments addressed the 2010 Revised Draft Program EIR; however, many addressed the May 2008 Final Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (2008 Program EIR/EIS) and other Authority documents such as the Authority's Business Plan. Many comments offered opinions about the proposed project generally. The following standard responses address the cumulative body of hundreds of comments that raise the same or very similar points regarding the 2010 Revised Draft Program EIR, the portion of the HST system proposed to connect the San Francisco Bay Area to the Central Valley, and the Authority's choice of corridor alignment for the HST system to connect the Bay Area to the Central Valley. This section provides a single location where the most frequently raised comments are addressed. Responses referring to other documents or other reviews, such as project-level environmental studies, are intended to provide information and are not to be construed as prejudging the outcome of this process.

The following standard responses are intended to provide general responses to the most frequently raised comments. Topics include:

- Standard Response 1 Purpose and Scope of the 2010 Revised Draft Program EIR
- Standard Response 2 Tiered Planning Process for HST System and Relationship of Bay Area to Central Valley Program EIR Process to Project-Level EIRs/EISs
- Standard Response 3 Level of Detail for Impacts Analysis and Mitigation
- Standard Response 4 Ridership Modeling
- Standard Response 5 Noise Impacts
- Standard Response 6 Effect of the Project on Property Values, Communities, and Quality of Life
- Standard Response 7 Project Eminent Domain Issues
- Standard Response 8 The Authority's Business Plan
- Standard Response 9 Union Pacific Railroad Issues
- Standard Response 10 Alternatives

STANDARD RESPONSE 1**Purpose and Scope of the Revised Draft Program EIR**

Numerous comments assert that the Authority must respond to comments not only on the 2010 Revised Draft Program EIR Material, but also on new comments on the analysis in the 2008 Final Program EIR/EIS. Other comments appear to disregard the context of the current recirculated EIR material and treat the public comment period as an opportunity to raise issues beyond the scope of the recirculated material. Some comments threaten further lawsuits if the Authority does not respond to comments on the 2008 Final Program EIR/EIS. Still other comments suggest that the Authority should have recirculated the entire Program EIR, or that the Authority should have prepared an entirely new Draft Program EIR and started the environmental analysis process anew.

As explained in the 2010 Revised Program EIR, Chapter 1, the Authority circulated the revised Draft Program EIR Material to comply with the final judgment in the *Town of Atherton* litigation on the 2008 Program EIR/EIS. The judgment incorporates the Sacramento Superior Court's ruling, which was included as Appendix A to the Revised Draft Program EIR. In the ruling, the Court concluded that the Authority's 2008 Final Program EIR failed to comply with the California Environmental Quality Act (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 Railroad'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.)

- **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. (Ruling, p. 21.)

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 does 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)). The 2010 Revised Draft Program EIR Material therefore contains the revised information and analysis to address the issues that the Court identified in its ruling. The final court judgment did not require the Authority to revise and recirculate the entire 2008 Final Program EIR or to start the CEQA process from scratch.

Regarding the Authority's duty to respond to comments under CEQA, the Authority has followed the direction in CEQA Guidelines section 15088.5(f)(2). This provision indicates that, where a lead agency is revising and recirculating only a portion of an EIR, "the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR." The provision further indicates that the lead agency need respond only to those comments received during the recirculation period that relate to the portions of the EIR that were revised and recirculated. Following this CEQA Guideline section, the Authority's responses to comments address all the comments received that pertain to the 2010 Revised Draft Program EIR Material. In addition, the Authority has gone beyond the minimum requirements by providing responses to comments on all significant environmental issues raised in the comments.

STANDARD RESPONSE 2**Tiered Planning Process for HST System and Relationship of Bay Area to Central Valley Program EIR Process to Project-Level EIR/EISs**

Many comments have requested information about impacts and mitigation that cannot be known at the program level because the project design and engineering have not progressed to the point where that analysis can be completed. Numerous comments identified information that has been or is being generated as part of project-level EIR/EIS work for the San Francisco to San Jose and San Jose to Merced sections of the HST system and commented that such information should be considered as part of the current program EIR process. Other comments appear to be comments directed at the Authority's project-level preliminary alternatives analysis work. Other comments suggest that the Authority now has an inherent bias in favor of the Pacheco Pass network alternative due to ongoing project-level EIR/EIS work being undertaken while the Program EIR is being revised and recirculated.

Since 2000, the Authority, in cooperation with the Federal Railroad Administration (FRA), has been using the tiering provisions in CEQA and in the National Environmental Policy Act (NEPA) to make discrete, incremental decisions about the HST system in California. Tiering refers to the use of broader and more general EIRs to evaluate general projects or broad policy decisions, followed by more specific EIRs to evaluate more specific projects or decisions at identified locations. The Authority and the FRA completed the *Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System* (Statewide Program EIR/EIS) in 2005 and used that first-tier environmental document to support its selection of the HST system to serve California's future statewide transportation needs, in addition to the state's freeways, highways, airports, and conventional rail systems. The 2005 Program EIR/EIS also supported the Authority's and FRA's selection of preferred general corridor alignments and station locations for further study in second-tier, project-level EIR/EIS documents, with the exception of alignments and station locations for connecting the Bay Area to the

Central Valley. For this portion of the future HST system, the Authority and FRA defined the broad corridor between and including the Altamont Pass and the Pacheco Pass for further first-tier, program-level study to be conducted prior to selecting alignments and station locations for further project-level study.

The Authority and FRA completed the Draft Bay Area to Central Valley Program EIR/EIS in July 2007, circulated the document for public comment, and the 2008 Final Program EIR/EIS in May. The 2008 Program EIR/EIS was specifically designed to assist the Authority in making the fundamental choice of a preferred alignment within the broad corridor between and including the Altamont Pass and Pacheco Pass for the HST segment connecting the San Francisco Bay Area to the Central Valley. The Authority certified the 2008 Final Program EIR for compliance with CEQA in July 2008 and selected the Pacheco Pass network alternative with major stations in San Francisco and San Jose as the preferred alternative to advance into project-level, second-tier environmental review.

The Authority's decisions were subsequently challenged in litigation. The result of the litigation was that the Authority rescinded its certification of the May 2008 Final Program EIR/EIS as complying with CEQA and rescinded its selection of the Pacheco Pass network alternative serving San Francisco via San Jose as the preferred alternative for further study. To comply with the final court judgment, the Authority has circulated the 2010 Revised Draft Program EIR for 45 days, has prepared the current responses to comments as part of a Revised Final Program EIR, and will consider these materials before making a determination whether to take the following actions:

1. Certify the Revised Final Program EIR for compliance with CEQA
2. Select a preferred network alternative and station locations for further study

3. Adopt CEQA findings of facts
4. Adopt a statement of overriding considerations, and
5. Adopt a mitigation monitoring and reporting program

The Authority intends to complete the program-level decision making process in the near future at a regularly noticed meeting of the Authority Board. With selection of a preferred network alternative and station locations for further study, the Authority and FRA would move into more detailed, project-level planning and design for the HST system.

As part of the *Town of Atherton* litigation, the Superior Court considered a request by the plaintiffs in the case for an order requiring the Authority to stop its more detailed, project-level planning and design for the HST system in the Bay Area to Central Valley study area until it had corrected its program EIR and made a new program-level decision. The Court declined to issue such an order enjoining the Authority from proceeding with its project-level EIR work. The Authority has therefore proceeded with certain initial steps in project-level planning and environmental review for the San Francisco to San Jose and the San Jose to Merced sections of the HST system. The project-level work has included project scoping as contemplated in NEPA and CEQA, early consultation with state and federal agencies, preliminary screening of potential project-level alternatives, 15% design, and many public information meetings.

For those comments received on the current program-level EIR that appear to address issues identified as part of project-level planning, such as preliminary alternative screening, or comments on issues in detail that goes beyond the program-level analysis, the Authority has referred the comments to the Authority staff and consultants who are preparing the applicable project-level EIR/EIS.

The Authority acknowledges that it must, and intends to, make a new program-level decision on a preferred network alternative and preferred station locations for the Bay Area to Central Valley study area. The Authority further acknowledges that it must, and fully intends to, give fair consideration to all of the information in the 2008 Final Program EIR, the 2010 Draft and Final Revised Program

EIR, and the entire record before it in making a new decision. The new decision has the potential to result in changes to the project-level EIR/EIS work currently underway. The extent of any such changes, and any appropriate further direction to staff concerning the preparation of project EIR/EIS documents, can only be determined once a new decision on the 2010 Revised Final Program EIR is made. See also Standard Response 3 below, which discusses the differences between program-level and project-level environmental analyses, 2008 Final Program EIR, Volume 3, pp 19-2 through 19-5.

Tiering provides for a suitable level of detail in an environmental analysis and allows an agency to “focus upon the issues ripe for decision at each level of environmental review,” i.e., a broad, more general analysis for broad policy choices to be made based on a programmatic EIR and more detailed, site-specific information for decisions to be made to place facilities at specific locations based on a project-level EIR (Public Resources Code, section 21093, subd.(a)). Thus, each EIR will have an appropriate level of detail for the decisions to be made, and there is no requirement to include in a program EIR the more detailed information now being developed for project EIRs. Such a process would lead to confusion and potentially endless loops of analysis, rather than providing the information needed at the appropriate points for a series of decisions.

Finally, the Authority’s actions to proceed with project-level EIR development for the Pacheco Pass network alternative do not create an undue bias because they do not prejudice the consideration of alternatives or limit or impinge on the Authority Board’s discretion to make a fair policy choice of a network alternative to connect the Bay Area to the Central Valley. The Authority is aware of its duty under CEQA to consider the full record before it in selecting a network alternative for further study, and that it cannot simply reject alternatives because it has invested in early project-level studies for the Pacheco Pass network alternative. The Authority Board will have before it the staff recommendation of a preferred network alternative, as well as information and analysis regarding the full range of network alternatives identified in the 2008 Final Program EIR. The Authority Board will make a new decision after fairly and

fully considering the full record before it, including the extensive public comment contained in the 2010 Revised Final Program EIR.

STANDARD RESPONSE 3**Level of Detail for Impacts Analysis and Mitigation**

Numerous comments were critical of the level of detail of analysis in the May 2008 Final Program EIR/EIS and in the 2010 Revised Draft Program EIR. Many comments suggested the level of detail was not adequate for identifying impacts and distinguishing between alternatives. Other comments suggested the Authority could not defer a detailed analysis of impacts and mitigation and needed to revise and recirculate the program EIR to incorporate a more detailed analysis of various impacts and mitigation.

Program EIRs and Level of Detail

The timing of EIR preparation involves a balance of competing factors. The CEQA Guidelines recognize that a lead agency should prepare an EIR “as early as feasible” in the planning process so that environmental considerations can influence the project design, “yet late enough to provide meaningful information for environmental assessment.” (CEQA Guidelines, § 15004, subd. (b).) Tiering of EIRs allows an agency the discretion to strike an appropriate balance between CEQA’s mandate for conducting environmental review as early as feasible and the need to take complex decision making processes one step at a time.

As discussed above in Standard Response 2, the Authority and FRA are intentionally using a tiered environmental review process to make decisions about the HST system in California. The HST system consists of logical linear sections in a chain of contemplated actions that would be carried out under the same authorizing statutory and regulatory authority, each section with similar environmental effects that can be mitigated in similar ways or using similar methods applied at specific sites along the system. The 2005 Statewide Program EIR/EIS, the 2008 Program EIR/EIS, and the 2010 Revised Draft Program EIR are part of the first-tier, program-level environmental analysis to support the Authority’s consideration of broad policy and program alternatives and program-wide mitigation strategies at an early stage of decision making. For the Bay Area to

Central Valley portion of the HST system, the Authority will consider whether to certify the Revised Final Program EIR, and if it does certify the document, then it will consider making the following decisions:

- Choice of a network alternative to connect the San Francisco Bay Area to the Central Valley, i.e., Pacheco Pass, Altamont Pass, or Pacheco Pass with Altamont Pass (local service);
- Choice of alignment alternatives within the selected network alternative; and
- Choice of station location options.

The programmatic level of detail in the May 2008 Program EIR/EIS and the Revised Draft Program EIR is intended to be commensurate with the programmatic nature of the decisions under consideration. More detailed analysis of site-specific environmental impacts and mitigation measures for a more detailed project (selection of specific HST track placement alternative, selection of specific station locations) will be considered in subsequent project-level EIRs/EISs.

Court Consideration of Level of Detail in Town of Atherton Litigation

The issue of the appropriate level of detail for the Authority’s program EIR was raised in the *Town of Atherton* litigation. The Superior Court held that the Final Program EIR was adequately detailed for a program EIR with respect to the analysis of biological resources, noise, visual effects, and impacts on mature and heritage trees. (Ruling on Submitted Matter, pp. 10, 13, 14, 16.) The issue for which the Court held additional detail was required involved the description of the project between San Jose and Gilroy and related land use impacts. (*Id.*, pp. 6, 21.) Chapter 2 of the 2010 Revised Draft Program EIR Material provided additional and corrected detail for that portion of the project description and provided additional discussion of the potential for impacts on land use, the Monterey

Highway, and Union Pacific Railroad (UPRR) freight operations in this area. The May 2008 Final Program EIR, as revised by the 2010 Revised Draft and Final Program EIR Material, therefore provides a sufficient level of information for first-tier, programmatic decision making.

Sufficiency of EIR Information for Programmatic Decision and Need for Further Revision and Recirculation

The general level of detail in the EIR's impacts analysis and the general nature of the mitigation strategies are appropriate for the broad decisions to be made. The Program EIR identifies critical environmental impact differences between the Altamont Pass, Pacheco Pass, and Pacheco Pass with Altamont Pass (local service) alternatives for connecting the Bay Area with the Central Valley. The document also reveals differences related to the ability of each option to meet the project purpose, need, and objectives and to be feasibly implemented. These differences are precisely the type of information that is needed for the decision makers to make the overall choice of a network alternative and station locations. The May 2008 Final Program EIR, Chapter 3, "Affected Environment, Environmental Consequences, and Mitigation Strategies," Section 3.0.1, "Purpose and Content of This Chapter," states:

... The analysis presented in this chapter addresses the general effects of a program of actions that would make up the proposed HST system in the Bay Area to Central Valley study region. This chapter describes the general differences in potential environmental consequences between the No Project and the HST Alignment Alternatives identified in Chapter 2. The analysis also identifies key differences among the potential impacts associated with the various HST Alignment Alternatives and station location options, to support the selection of preferred alignments and station

location options in the Bay Area to Central Valley study region.

The 2008 Final Program EIR does not purport to be able to identify all of the detailed impacts of each alignment or station location option but rather focuses on identifying and describing key differences in potential impacts for each of the alternatives. More detailed analyses will be provided in future project-level environmental documents.

The general level of detail in a program EIR can be frustrating for those who wish to have much more detail up front at the program level; however, the Authority continues to believe its use of CEQA's tiering provisions is appropriate. The purpose of tiering and program EIRs is to allow a lead agency to focus on decisions that are ripe for review at the first tier. In this case, that decision includes the selection of an overall network alternative for the HST system to connect the Bay Area to the Central Valley based on the information gathered and assessed at a program-level of detail. While second-tier, project-level information has been and continues to be generated in the program EIR study area, the existence of that information does not convert the Authority's program-level decision into a project-level one. Rather, under CEQA's tiering rules, a detailed analysis of impacts and mitigation based on detailed project design is appropriately deferred to second-tier EIRs. Project-level information does not trigger another round of revision and recirculation but rather is appropriately addressed in project-level EIRs.

STANDARD RESPONSE 4**Comments about the Ridership Forecasts**

Many comments expressed concern about the ridership forecasts used in the Bay Area to Central Valley Program EIR. Some comments expressed confusion about how the ridership forecasts were derived, as well as the existence of different forecast results prepared for the Program EIR/EIS and the 2009 Business Plan. Many commenters expressed concern that the ridership forecasts were exaggerated or overly optimistic, or lacked an adequate peer review. Many suggested that the forecasts needed to be redone to account for changed economic conditions. Other comments questioned the ridership forecasts on a more technical basis, suggesting that certain parameters of the model were incorrect in a manner that rendered the model a flawed tool for forecasting.

The ridership forecasts used in the 2008 Final Program EIR are not an area identified by the Superior Court for additional work to comply with CEQA. The Authority recognizes, however, that the ridership forecasts for the HST system as a whole and for the Altamont and Pacheco network alternatives are the subject of considerable public interest in light of the many comments received on this topic. This Standard Response is intended to provide a single basic response to the collective set of comments, both general and technical.

At the outset, the Authority does not agree with the general statements in numerous letters that the ridership model is flawed, the forecasts inaccurate, or that the ridership forecasts need to be revised as part of further recirculation of the Program EIR. The California High-Speed Rail Ridership and Revenue model (HSR R&R model) is a complex system of dozens of interrelated, state-of-the-art model components that span different geographies, different trip purposes, and different travel market segments. The model reflects an appropriate blend of theory and judgment, which is always required in real-world applications of travel forecasting models. The model produces realistic results that are sensitive to the key input

variables, and is an appropriate tool for the environmental review purpose for which it has been used. No revisions are necessary.

Development of the Ridership and Revenue Forecasting Model

The High-Speed Rail Ridership and Revenue Forecasting Study, which was led by the Metropolitan Transportation Commission (MTC), was a state-of-the-art transportation modeling effort designed to portray what future conditions might look like in California with and without a high-speed train. The study was performed by experts in the field of transportation modeling, Cambridge Systematics, Inc. (CS), and took roughly two years to complete. The resulting ridership and revenue forecast provided, and continues to provide, sound information that the Authority has considered in its planning decisions.

The objective of the study was to develop a new statewide network-based travel demand model that would serve a variety of planning and operational purposes:

- Evaluating high-speed rail ridership and revenue on a statewide basis;
- Evaluating potential alternative alignments for high-speed rail in and out of the San Francisco Bay Area;
- Providing a foundation for other statewide planning purpose, including high-speed rail alignment analysis, and for regional agencies to better understand interregional travel.

The purpose of travel demand models like the HSR R&R Model is to forecast future travel patterns and demand as a function of variables such as population and employment, travel time and cost, fuel costs, rail and airline schedules, etc. Travel demand models provide valuable tools to assist planners and policy makers in analyzing the costs and benefits of various transportation alternatives since they

provide consistent and reproducible forecasts of future travel based on the input assumptions. The HSR R&R Model was developed using accepted modeling practices, and has served as a state-of-the-practice tool to support the Authority's planning efforts.

Travel Surveys Used for Model Development

Some comments questioned the representativeness of the survey data used for the model estimation. It has been suggested that only one of the surveys used for the model estimation, the California Statewide Household Travel Survey from a 2000-2001 project performed for Caltrans "meets the criteria of a California based random sample of trip mode choices." Such a statement is misleading on two fronts:

1. It presupposes that a survey drawn from a purely random sample of the entire population will always produce representative results; and
2. It further presupposes that other survey techniques cannot produce representative results after adjusting for characteristics of the sampling frame.

Both suppositions are incorrect.

Regarding the first supposition, random sample surveys of the entire population are a notoriously poor technique for gathering information on market segments that represent a relatively small portion of the population. Such is the case with interregional air and rail travelers, which account for 10.9% and 1.1%, respectively, of observed interregional mode share in California (Cambridge Systematics 2006, Table 5.2). The California Statewide Household Travel Survey is a good example of this potential problem. Of the 17,000 households that were randomly surveyed, a mere 25 interregional trips were made by air passengers and rail riders combined. As a result, the California Statewide Household Travel Survey produced a survey dataset in which 94.5% of observed interregional long trips were made by auto, and only 2.2% of such trips were made by air or rail (Cambridge Systematics 2007a, Table 2.2) (compared to 12% in the general population). This "random

sample survey" did not produce a dataset that was representative of general travel preferences of Californians.

Regarding the second supposition, the assumption that only a random sample survey can be used for model estimation is incorrect. The use of targeted sampling procedures and discrete choice analysis have been developed and widely used, in part, to address the difficulty and cost of collecting sufficient data for model estimation using simple random sampling techniques (Manski and Lerman 1977, Ben-Akiva and Lerman 1985).

For this project, the survey dataset from the California Statewide Household Travel Survey was enriched by a new data collection effort. Approximately 3,000 new stated-preference surveys were collected reflecting travel by auto, rail, and air. These new observations were collected using a proven technique known as "choice-based sampling." Instead of randomly calling respondents at their homes, surveys were conducted on trains and at airports by randomly intercepting these travelers. These surveys were used to enrich the larger random sample by including more statistically significant response rates from segments of key interest to the project at hand.

However, since more observations were collected from rail riders and air passengers than their share of the interregional travel market, an adjustment had to be made once the models were estimated. The adjustment process is called a "calibration of mode constants." By calibrating mode constants, travel market shares are adjusted to reflect the true market shares in the population. The model development team employed a method that has been proven, has been used widely and consistently to calibrate models, and is well established in literature and in practice.

In summary, a large randomly sampled survey data set was enriched using a supplemental survey to meet project objectives, and to reflect and quantify the decisions made by rail riders and air passengers. In addition, the model development team used the most tested and best available approach to calibrate the model to be more representative of the population. These methods were, and continue to be, both sound and appropriate.

Peer Review Process

Peer review is considered a “best practices” technique when developing travel demand models like the HSR R&R Model. Peer review provides “an objective assessment of a travel demand model with respect to state-of-practice and agency modeling goals (Federal Highway Administration 2010b).” A peer review process helps ensure that the modeling team’s technical processes meet an agency’s needs, and also meet the standards of professional practice (U.S. Department of Transportation 2010). Importantly, a good peer review process will provide up-front guidance to the model development team on key issues such as intended use of the model, basic model structure, survey design and sampling plan, model estimation results, and reasonableness of validation. While a peer review process may also review and comment upon the reasonableness of model results, peer review generally does not approve or accept specific model details.

The High-Speed Rail Ridership and Revenue Forecasting Study incorporated a robust peer review process at multiple stages of model development. The peer review panel was comprised of international modeling and high-speed rail experts from academia, public agencies, and the private sector. Interaction with the panel occurred on three occasions, with panel members providing technical guidance for the model design, model development, and the resulting forecasts of ridership and revenue. Comments from the first peer review panel meeting resulted in changes to the proposed approaches to the model structure, the survey data collection plan, and to the proposed performance measures. Comments from the second peer review panel meeting resulted in changes to different aspects of the interregional model – including constraining of coefficients - and to the forecast assumptions. The third peer review exchange focused on model validation and the final ridership and revenue forecasts. In summary, the High-Speed Rail Ridership and Revenue Forecasting Study integrated peer review at multiple stages. The overall model structure, details, input variables, and the resulting ridership and revenue forecasts were products of an extensive peer review process.

Final Ridership and Revenue Model

The final HSR R&R model was developed through a standard process of model estimation, calibration, and validation. This development process began in early 2005 and concluded in February 2007. Only one fully developed model has ever existed, and this model has been used to prepare all forecasts. Importantly, model constants and coefficients were final as of February 7, 2007, prior to the development of any forecasts used in the Program EIR/EIS, and did not change after that date.

A number of comments have been offered related to the constraining of coefficients and constants during the model development process. In the development and application of practical travel demand models, it is often the case that various sources of data need to be reconciled with different or conflicting empirical evidence from the model estimation. In these cases, it is absolutely necessary to use analyst judgment to reconcile different data and arrive at the most practical model possible. The decision to constrain certain coefficients was made neither unilaterally nor arbitrarily, but was based on the best available data, published literature, and accepted practice.

These judgments were further scrutinized by peer review during the model development process. The peer review panel reviewed coefficients that were produced through initial model estimation. The panel extensively debated the coefficients and variables, and offered feedback and guidance to the model development team in full knowledge that coefficient values could change through the process of model calibration and validation and that the constants would be finalized at a later date. The model development team proceeded with normal model calibration and validation activities to address the panel’s feedback and develop the final model. These activities and the final model included adjustments to the coefficients and estimation of a variety of model constants.

Constraining variables is a common practice in travel model development. Model coefficients are constrained when estimation results are clearly unrealistic or when constraining provides more realistic results during the model calibration and sensitivity testing

process. The Federal Transit Administration (FTA) accepts this practice for Section 5309 New Starts applications and, in its guidelines, provides reasonable ranges for model coefficients relating to travel time and travel cost. While FTA accepts values outside of the specified ranges, they require New Starts applicants to “provide compelling evidence” if a model coefficient is outside of a specified range (Ryan 2004).

Comments regarding the level of constraint have generally focused on the coefficient for service headway being constrained to be equal to the coefficient for in-vehicle travel time. Comments have incorrectly related headway to the average wait time that results from service headways. The headway coefficient is not a coefficient on average wait time. The impact of average wait time for specific modes (air, conventional rail, and high speed rail) has been included in mode specific constants for those modes. Instead, headway represents a convenience measure and should not be related to average wait time coefficients used in urban transportation modeling or other high speed rail models that use different model constructs. Accordingly, the headway coefficient was constrained, and as a result reflects the unique case of high-speed trains that offer far more frequent interregional service than is currently available on conventional intercity rail services such as Amtrak. The adjustment made to the headway coefficient was within the range of reasonable values presented to peer review during the model development process.

Evolution In Input Assumptions and Ridership and Revenue Forecasts

According to the base travel demand forecast prepared using the HSR R&R model, the HST system would carry at least 88 million passengers per year by 2030. This forecast assumes current costs for air and automobile transportation would remain constant in real value, and that the state’s economy would grow in-line with long-term projections that existed in 2006. HST service plans were also adjusted to satisfy the new forecast for high-speed train travel demand. Ridership and revenue sensitivity analyses were also performed using different assumptions for a 50% real increase in the

costs for air and automobile travel, which resulted in a high forecast of potential ridership for the HST system of 117 million annual passengers for 2030.

The high ridership forecast of 117 million intercity trips served as the representative worst-case scenario for analyzing the potential environmental impacts from construction and operation of the HST system through 2030. This high forecast was generally used to define and develop the HST alternatives and was referred to in the Program EIR/EIS as the “representative demand.” In some specific analyses (e.g., energy, air quality, and transportation), the HST system would result in potential benefits. In those cases, the base ridership forecast of 88 million served as the representative demand scenario for analysis in the Program EIS/EIR.

Since the time that the ridership and revenue forecasts were completed for the Program EIR/EIS in 2007, project development activities have continued on the HST project throughout California. These activities have included additional ridership and revenue forecasts using operating, fare, and population inputs that vary from the assumptions used in the Program EIR/EIS. One example of such different forecasts is illustrated by the 2009 Business Plan, which incorporated an HST operating plan with more off-peak service and updated travel times, new assumptions regarding potential parking costs at airports and HST stations, and higher HST fares than assumed in the Program EIR/EIS.

Such changes in assumptions are a normal and expected part of project development, and do not necessitate revisiting decisions reached under prior assumptions. For example, the Federal government understands that assumptions and plans regarding projects and ridership forecasts may change as a project moves through the NEPA and planning processes. One key example of this relates to the FTA New Starts process, illustrated by regulations documented in 49 CFR 611.7; the New Starts process is often integrated with EIS preparation and other project development activities. Those regulations establish a sequence of studies progressing from alternatives analysis, to preliminary engineering, to final design. It is expected throughout the planning and project

development phases that assumptions will be continually refined. In fact, FTA is now requiring updated information to be incorporated as it becomes available - for example new ridership and other surveys. Also significantly, Federal approval to initiate preliminary engineering will be considered only after alternatives analysis is complete and the NEPA process has been initiated. Further, Federal approval for final design will be considered only if preliminary engineering is complete and the NEPA process has been completed through a Record of Decision. For preliminary engineering and final design, FTA "approval will be based on the results of its evaluation as described in Parts §§ 611.9–611.13 of this Rule." The evaluation criteria include mobility improvements, environmental benefits, operating efficiencies, transportation user benefits [which are based on ridership forecasts], and land use and economic development impacts. Part §§ 611.9 further states, "*As a candidate project proceeds through preliminary engineering and final design, a greater degree of certainty is expected with respect to the scope of the project...* [emphasis added]."

More recent guidance from the Federal Highway Administration furthers this point, explaining that: "[t]he project development process can be long, with varying levels of forecasting detail typically necessary at different stages in the process... (Federal Highway Administration 2010a)." This guidance provides examples of project screening, alternatives analysis, and EIS preparation.

Ridership Forecasts and Changing Economic Conditions

Some comments have suggested that ridership forecasts should be redone to reflect the current economic recession. Regeneration of ridership and revenue forecasts is not necessary since the forecasts are for year 2030 and beyond, and rely upon long-term economic and demographic assumptions that are generally unaffected by short-term variations in economic performance. The most current long-term, statewide projections are substantively similar to the values used in the Program EIR/EIS:

- Year 2030 Population: Current statewide projection is 49,240,891 (California Department of Finance 2007). Projection

used in the Program EIR/EIS was 48,110,671 (California High-Speed Rail Authority and Federal Railroad Administration 2008, Table 5.3-5).

- Year 2030 Employment: Current statewide projection is 26,338,021 (Woods & Poole Economics 2009). Projection used in the Program EIR/EIS was 28,617,864 (California High-Speed Rail Authority and Federal Railroad Administration 2008, Table 5.3-5).

Importantly, all of the ridership and revenue forecasting conducted for the Program EIR/EIS used identical assumptions for all alternatives, allowing each alternative to be tested in an unbiased manner so that the related benefits and impacts could be estimated and compared across alternatives. For example, all forecasts were developed with the same population and employment projections, fuel costs, air and rail fares, parking cost assumptions, intercity air and rail frequencies and travel times, etc. The only difference, which was a function of the definition of the network alternatives, related to the number of HST trains that operated to the different Bay Area termini.

UC Berkeley Critique

As mentioned in a number of comments, over the last several months UC Berkeley's Institute for Transportation Studies (ITS) has conducted a critique of the HSR R&R model. The ITS Final Report of the critique was provided to the California High-Speed Rail Authority on June 30, 2010. The basic conclusion of the ITS Final Report was that CS "followed generally accepted professional standards in carrying out the demand modeling and analysis," but the HSR R&R model has various alleged flaws. One of the ITS Final Report authors presented the ITS findings to the Authority board at its July 2010 meeting. CS offered its own presentation responding to the ITS Final Report and disputing the conclusions in the ITS report. The Authority board will have the full record of this information before it in conjunction with its anticipated consideration of whether to certify the Revised Final Program EIR and to make a new decision on a preferred HST network alternative for connecting the San

Francisco Bay Area and the Central Valley (California High-Speed Rail Authority 2010a).

Forecast results suggest that HST is most competitive in intermediate to long-distance California markets where it offers:

- Much faster travel times than the lower cost and more convenient auto mode, particularly for people traveling in groups;
- Much faster travel times and higher frequencies than the lower cost conventional rail mode; and
- Equivalent door-to-door travel times and frequencies as the more expensive air mode.

For example, ridership forecasts prepared for the Program EIR/EIS show that more than one-third of the trips between the Los Angeles Basin and Bay Area choose HST; in this market, HSR takes approximately the same door-to-door time as air but costs about half as much under assumptions used in the Program EIR/EIS. For trips between the Bay Area and Central Valley, HST is most competitive for trips that begin or end in the southern Central Valley between Fresno and Bakersfield; in this submarket, HST has a 33% mode share for Pacheco and 27% for Altamont. The submarket between the Bay Area and northern Central Valley is dominated by the auto mode (about 95% mode share), which is about an hour (or less) slower than HST but costs about half as much; the HST mode share for this market is 4% for the Altamont scenario and 2% for Pacheco. HST is also not as competitive as auto for travel within the Central Valley, with HST capturing 4% of the market for the Altamont scenario and 3% for Pacheco.

HST is projected to draw about 98% of its interregional ridership from diversion of auto, air, and conventional passenger rail trips around the state; this portion of HST's projected ridership would exist on the system even if HST were not built. About 75% of this diversion will come from auto, 13% from intra-state air, and 12% from conventional passenger rail.

As noted earlier, in base forecasts prepared for the Program EIR/EIS, the California HST system averaged in the neighborhood of 88 million annual passengers in year 2030. This statewide ridership projection and the HST market shares noted in preceding paragraphs are logical given observed HST ridership patterns around the world.

For example, in Japan, the 343-mile Tokaido high-speed train line connecting Tokyo to Osaka currently carries over 145 million passengers annually. The entire Japanese high-speed train network (1,350 miles) currently carries over 335 million passengers a year. In France the TGV network, consisting of over 1,160 miles of new interconnected high-speed lines, carries over 100 million passengers each year. The Korean KTX trains travel on 420 miles of track carrying over 37 million passengers per year.

In Japan, the Shinkansen has been a very effective competitor with air transportation at distances up to 600 miles. In the market between Tokyo and Osaka (the two largest metropolitan areas in Japan), the Shinkansen carries approximately 81% of the air-rail market. Where the Shinkansen trip time is under two and a half hours, HSR captures at least 75% of the air-rail market. It is not until distances exceed roughly 600 miles (trips of four or more hours) that air travel exceeds the HSR market share.

In Europe, HSR has also captured major shares of air plus rail traffic in many markets (Travel Industry Wire 2007):

- In France, rail held 22% of the combined Paris-Marseille air-rail market before TGV Mediterranean went into service (2001), but in four years that market share rose to 65%. In 2006 it rose to 69% and EasyJet abandoned its Paris-Marseille flights.
- Spain's AVE has 53% of air/rail/road traffic on the Madrid-Seville route.
- The Madrid-Barcelona AVE route has gained 80% of the air/rail market since opening in February 2008.
- The Thalys between Paris and Brussels holds 52% of air/road traffic; after the high-speed rail line went into service, airlines discontinued flights Paris-Brussels.

- Eurostar has more than 70% of London-Paris market, 64% on London-Brussels.

Overall, the ridership projections for the California HST system are quite reasonable and logical when compared to international experience, particularly considering the larger size of the California travel market compared to many of these international examples (California High-Speed Rail Authority 2010b, pp. 16-17).

Availability Of Ridership Information

It is not possible to convey all of the ridership model and forecast information in the body of an EIR. Key comparative ridership information that identifies substantive differences between network alternatives was included in the Summary and Chapters 2 and 7. Remaining ridership results and documentation of the methodology used to obtain projected ridership have been included in a series of technical reports that are posted on the Authority website:

- The model design was described in several publicly available documents during its development: Model Design, Data Collection, and Performance Measures Technical Memorandum (May 2005); Levels-of-Service Assumptions and Forecast Alternatives (August 2006); and Interregional Model System Development (August 2006); Statewide Model Validation, Final Report (July 2007).
- The surveys and other data used to estimate, calibrate, validate and apply the model are discussed in High-Speed Rail Study Survey Documentation (December 2005); Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study, Socio-Economic Data, Transportation Supply, and Base-Year Travel Patterns Data (December 2005); and Statewide Model Validation, Final Report (July 2007).
- The model and its development are summarized in Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study, Final Report (July 2007).
- Validation of the model is summarized in Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study, Statewide Model Validation, Final Report (July 2007).
- The ridership and revenue forecasts generated from the model are documented in Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study, Ridership and Revenue Forecasts, Final Report (August 2007).

Some comments have questioned why certain components of the HSR R&R model (particular constants and coefficients), were revised,

but the final component values were not published in a final report. As stated above, it is universal practice in the industry to calibrate a model in a dynamic, rapidly-paced process that tests dozens of different options. Although MTC did not issue a report detailing all components of the final model, which is consistent with professional practice, it is the Authority's understanding that the ridership and revenue model, including the final constants and coefficients, has been publicly available directly from MTC since the study was completed in 2007. Any member of the public who wished to have access to the model could make a request to MTC, which had modeling experts on staff that could assist with making the model available. It is also the Authority's understanding that some entities, including representatives of Caltrans, the University of California at Davis, the University of California at Berkeley, and the University of Calgary, have requested and received some or all of the model files.

Conclusion

In summary, the model development approach used widely accepted methods and professional standards reflecting the theory and practice of model estimation, validation, and application. The resulting model is policy-sensitive. It allows the Authority to address questions related to alignments and to levels of service. Its sensitivity to a range of different policies has been tested successfully. This sensitivity is the best proof of a carefully developed and calibrated model. It ensures that the HSR R&R model has and will continue to provide the Authority with valuable information in the planning decision-making process.

The HST ridership and revenue forecasts prepared by MTC in partnership with the Authority concluded that both the Pacheco Pass and Altamont Pass network alternatives have high ridership and revenue potential. While additional forecasts with different assumptions may result in somewhat different results, the bottom-line conclusion is expected to remain the same, and therefore ridership was not a major factor in differentiating between the Altamont Pass and Pacheco Pass alternatives.

STANDARD RESPONSE 5**Noise and Vibration Impacts**

Many comments requested additional information about potential noise and vibration impacts and mitigation related to the implementation of the HST system. Numerous comments identified information that has been or is being generated during project-level EIR/EIS work for the San Francisco to San Jose and San Jose to Merced sections of the high-speed train system and commented that such information should be considered as part of the current program EIR process.

These comments request detailed information that cannot be known at the program level because the project design and engineering has not progressed to the point where that analysis can be completed. The project-level EIR/EIS noise and vibration studies will provide a detailed assessment of the potential effects of the HST operations on land uses along the proposed alignments and around stations and other facilities. The studies will be conducted in accordance with the Federal Railroad Administration (FRA) procedures presented in the High-Speed Ground Transportation Noise and Vibration Impact Assessment Report prepared October 2005, referred to herein as the FRA Guidance Manual.

Program-Level Analysis of Noise and Vibration

The sufficiency of the program level analysis of potential noise and vibration impacts from the HST system, as included in the 2008 Bay Area to Central Valley Final Program EIR, was challenged and was reviewed by the Superior Court in the *Town of Atherton* case. The Court's ruling in the *Town of Atherton* case concluded that the Final Program EIR contains an adequate level of detail for programmatic analysis regarding the noise and vibration analysis, noting that the Authority had proceeded in accordance with the FRA Guidance Manual and that more detailed mitigation strategies would for noise and vibration impacts would be developed in the next stage of environmental analysis. (Revised Draft Program EIR, Appendix A, Ruling on Submitted Matter, p. 13.) The Court's ruling noting a

defect in the Authority's findings regarding vibration impacts. This is an issue to be addressed in the Authority's future decision on the Final EIR and its selection of a corridor and stations to connect the Bay Area to the Central Valley portion of the HST system.

The FRA Guidance Manual reflects the result of research conducted for the FRA and is presented as part of FRA's efforts to provide guidance in the consideration of HST as a transportation option in those intercity corridors where it has the potential to be a cost effective and environmentally sound component of the intermodal transportation system.

Experience during previous environmental impact reviews of high-speed rail projects has shown that possible increases in noise and vibration are frequently among the potential impacts of most concern to residents in the vicinity of the proposed project. With growing interest in HST projects, FRA saw a need to provide guidance and procedures to assist in the evaluation of potential noise and vibration impacts from such projects. The guidance also provides information on ways in which project design can incorporate measures to reduce impacts to address concerns, and guidance in evaluating potential mitigation. The methodology and procedure presented in the FRA Guidance Manual addresses program and project-level review of noise and vibration impacts related to HST systems.

The noise analysis in the Program EIR/EIS broadly compares the relative difference in potential impacts among the alternatives. Two basic techniques were used for analysis of HST: a screening analysis and a more specific analysis of typologies derived from representation HST locations. The screening analysis is based on the methods presented in Chapter 4, Initial Noise Evaluation, of the High-Speed Ground Transportation Noise and Vibration Impact Assessment Guidance Manual, October 2005 (FRA Manual). The Program level analysis identified the potential impacts of each

alignment alternative and station locations by project corridor. Mitigation strategies that would be used to reduce impacts were identified and subsequent detailed analysis was described to be prepared as part of the project EIR/EIS. These analyses will be done in accordance with the FRA Guidance Manual and will include a detailed noise and vibration assessment study of the effects of the HST operations. These operations will include the noise and vibration generated by the train operations, traffic noise generated at the HST stations, parking facilities, and at the maintenance facilities. Where calculations indicate that the HST operations may exceed the FRA Noise and Vibration impact criteria mitigation measures would be evaluated during the project-level studies, engineering refinement and design of the project.

Future Project-Level Analysis of Noise and Vibration

During detailed noise impact analysis noise sensitive receivers are identified within screening distances of proposed alignments. The screening distances are based on existing noise environment (urban, suburban, or rural/less developed), if the alignment is in or adjacent to a railroad corridor, highway corridor, or through a rural corridor, and speed of the train. These noise sensitive receivers consist of parks, residences and buildings where people sleep such as hotels and motels, institutional land uses with daytime and evening use, such as schools, places of worship, and libraries, and business uses that depend on quiet as an important part of operations, such as sound and motion picture recording studios. Noise measurements are conducted at these representative receivers within the screening distances to determine the ambient existing noise environment. These measured ambient noise levels are the basis of the FRA Noise Impact Criteria which is used to determine if a noise impact would occur at the receivers being studied.

The projected noise from the HST train operations is calculated using the methods in the FRA Guidance Manual. These calculations would reflect the type of HST (electric), expected train speeds, type and elevation of trackwork, distance to the receiver, ground terrain, and shielding provided by buildings between the receiver and the trackwork. Similar calculations are prepared for traffic noise. The

projected future noise levels of the HST operations are compared to the existing ambient noise to determine if the receivers being studied would be impacted. At locations where impacts are identified as likely to exceed federal criteria mitigation measures such as noise barriers will be evaluated for their potential to reduce the projected noise levels to receivers. The potential for "startle" effects will be considered and noise effects on livestock and wildlife will also be considered using the FRA criteria.

Receivers that could be affected by vibration from HSTs are identified using the FRA screening distances. The FRA Vibration Impact Criteria are used to establish the limits of vibration at each of the receivers being studied depending on their land use activities and expected train speeds. These FRA criteria address buildings where ambient vibrations must be kept low, such as research facilities and hospitals with diagnostic equipment; residential land uses and buildings where people sleep, such as hospitals; and institutional land uses including schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference. It is extremely rare for vibration from train operations to cause any sort of building damage. Any potentially fragile historic buildings located near a proposed alignment will receive case by case review in the project-level studies pursuant to the FRA Guidance Manual and the standards set by the Secretary of the Interior for historic structures.

At receivers that are already within close proximity to existing rail corridors, vibration measurements will be conducted to establish the existing conditions.

At each of the receivers being studied, vibration generated by the HST is calculated using the FRA reference ground-borne vibration levels for an electric motor unit (EMU) high-speed trainset similar to the trainset design that is likely to be used for the CAHST System. These reference vibration levels are adjusted by the ground attenuation of the ground between the track and the receiver. The ground attenuation is a measured value that represents the local conditions along the alignment for varying distances from the track.

The predicted future HST vibration levels are compared to the FRA Vibration Impact Criteria or for those receivers that are already exposed to rail activities, the existing ambient vibration levels, to determine if an impact would occur. Where impacts are identified, mitigation measures in the form of resilient rail design will be included as part of the final project design.

Potential noise and vibration impacts during construction will also be assessed. Noise and vibration limits during construction will be established by the Authority which will consider the land use activities adjoining the construction sites. These criteria will be developed with consideration to local noise ordinances that limit the hours or noise levels of construction. Noise control measures that will be imposed on the Contractor to mitigate impacts could include shielding between the construction sites and the impacted receivers and limiting the operations of noisy or vibratory equipment to certain hours of the day.

STANDARD RESPONSE 6**Effect of the Project on Property Values, Communities, and Quality of Life**

Numerous comments express fears, concerns, and opinions that planning for the HST system will result or has resulted in a drop in property values for properties along the existing Caltrain corridor. Numerous comments also express concerns regarding effects on communities along the Caltrain corridor from implementing the HST system, anticipating negative impacts on the quality of life in these communities.

The Authority acknowledges the comments expressing fear and concern over potential negative effects and diminishing property values due to the implementation of the HST system. The Authority is working with more than 100 communities across the state, values their feedback so that the best possible HST system can be developed, and will be addressing the specific mitigation needs of individual communities in project-level EIRs for individual geographic sections of the HST system, as the details of the system are more fully developed. The Authority believes that the HST system will provide substantial economic and environmental benefits to the state as a whole and to the communities it crosses—benefits in creating jobs, reducing air pollution and improving air quality, improving safety and circulation with grade separations, and providing a new transportation option that will relieve congestion on highways and airways. Recent reports, including from the United States Conference of Mayors and from CalPIRG, as well as information on the effects of Japan’s Shinkansen system, confirm the generally expected economic benefits to be derived from the HST system (United States Conference of Mayors 2010; CalPIRG 2010). In addition, studies have indicated that in various communities the addition of rail transit has resulted in increased property values for areas near and having access to transit, due to increased access to jobs, services, and activities (Cervero and Duncan 2009). Rail transit has also resulted in increased development opportunity and economic activity for these communities. While some negative effects may be noted, the positive effects generally tended to

outweigh the negative, and the studies suggest design approaches to reduce and minimize potential negative effects. Design refinements, community-specific impact studies, and detailed mitigation measures are all matters to be addressed in future project-level environmental studies and engineering design.

The Authority appreciates the comments identifying concerns with social and economic issues related to the proposed HST system in the Bay Area to Central Valley study area. The project’s potential impact on individual property owners, as well as on neighborhoods and communities, along the proposed network alternatives continues to be an issue of considerable public and community input, as well as an issue of great concern to the Authority. Such concern is heightened during times of economic difficulty at local, state, and national levels. Anecdotal information of real estate sale prices lower than previous sale prices is evidence of such economic difficulty, is thought to result from multiple factors that cannot be analyzed here, and is not thought to be caused by planning and conducting environmental studies for the HST system. All of these comments will be considered by the Authority Board in making decisions based on the extensive record for the 2008 Final Program EIR, as well as the 2010 Revised Draft and Final Program EIR Material. These issues would be further considered during project-level studies.

At the same time, an important consideration under CEQA is that an EIR is required to focus on the potential significant effects of a proposed project on the *environment*. “[E]nvironment” in this context means the physical conditions which exist within the area that will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance. Unlike physical changes from a proposed project, “[e]conomic and social changes resulting from a project shall *not* be treated as significant effects on the environment.” (CEQA

Guidelines, § 15064(e).) Economic and social information may be included in an EIR in whatever format the lead agency finds appropriate. (CEQA Guidelines, §§ 15131(a), (b); 15382.) The May 2008 Final Program EIR and the 2010 Draft and Final Revised Program EIR Material therefore appropriately focused the discussion on the project's potential to impact the physical environment. Comments expressing fear of future changes were not supported by evidence of physical impacts. Issues of community impacts, aesthetic impacts, and other physical effects resulting from the HST system at specific locations and associated with specific HST profiles and operational characteristics will be studied in detail in project-level EIRs for each part of the system.

STANDARD RESPONSE 7**Project Eminent Domain Issues**

A number of comments express fear and concern regarding the Authority's potential need to acquire properties in order to implement the HST system and the potential that as a result of property acquisition the project would displace numerous residents and businesses from such acquired properties. Other comments expressed concern for potential future hardship and disruption to businesses and communities during system construction.

The Authority has sought to use existing transportation corridors, like the Caltrain corridor, to the greatest extent feasible to minimize environmental impacts and property acquisition needs related to the project. The 2010 Revised Draft EIR Material identifies some limited right-of-way acquisition that could be needed along the Caltrain corridor between San Francisco and San Jose in some narrow areas. The amount of property and the specific parcels that may ultimately be needed can be determined only in the future after project-level studies and decisions on the final placement and profile (i.e., at-grade, elevated, or below-grade) of the proposed facilities. The Authority Board committed in July 2008 to investigate profile alternatives to avoid and minimize potential impacts, including property impacts, by considering trench, tunnel, aerial, and at-grade alignments between San Francisco and San Jose.

Although the Authority rescinded its July 2008 program decision, and will make a new decision, it has been examining profile alternatives carried forward into the project-level analysis. Specific property that may be necessary to implement a particular project-level alignment alternative will be addressed during the project-level environmental process. Because this is a program-level document, the analysis considered the potential for property acquisition on a broad scale. During the project-level reviews, the analysis of alternatives will identify the residential and nonresidential properties that could be

affected and all locations at which property acquisition, full or partial, would be needed for particular alternatives. The project-level EIR/EIS will include a comprehensive description of relocation impacts and relocation resources, and a Relocation Impact Report will be prepared for the project.

Eminent domain is the government power to acquire private property for public use and to compensate property owners based on the fair market value of their property taken by the government. (United States Constitution, 5th and 14th amendments; California Constitution, Article I.) Any property acquisition and relocation efforts by the Authority will be required to comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 as amended and Title VI and Title VIII of the Civil Rights Acts of 1964 and 1968, respectively. Any such efforts must follow the completion of project EIRs and the decisions to be made by the Authority about the placement and design of facilities in the system. To provide additional information to the public, the Authority has prepared and posted on its website in English and Spanish a pamphlet titled "Your Property, Your High-Speed Rail Project" (California High-Speed Rail Authority 2009d). The pamphlet is listed in the website Library under the topic "Right of Way."

In addition, project-level studies will include a detailed assessment of potential disruption to businesses and communities during project construction, evaluation of construction phasing and staging needs and impacts, and detailed mitigation plans to address impacts of construction on traffic, circulation, and property access. Such detailed assessments can be provided only when additional design and engineering detail is developed for the project-level studies.

STANDARD RESPONSE 8**The Authority's Business Plan**

The Authority received many comments that relate to the Authority's Business Plan rather than to the 2010 Revised Draft Program EIR. Many of these comments made general statements, such as "the Business Plan is inadequate" "the Business Plan is flawed," or state that the Authority must have a realistic and defensible business plan. Some comments questioned specific content of the Business Plan or identified information they felt was missing from the plan. Other comments suggested that the Authority had not satisfactorily established the "business case" for constructing the HST system. The Authority does not interpret comments on the Business Plan as comments on the environmental analysis in the 2010 Revised Program EIR. To the extent that the public comment on the Business Plan can be construed as a comment on the HST project as a whole, or the HST project in the Bay Area to Central Valley study area, the Authority provides the following response.

Since the Authority's July 2008 decisions based on the 2008 Final Program EIR, the Authority has prepared two Business Plans and one Business Plan Addendum. The first of these, published in November 2008 (California High-Speed Rail Authority 2008)¹, updated the Authority's first Business Plan from 2000. The 2008 Business Plan was intended to provide a credible, experience-based estimate of the HST system's financial and economic outlook at that time. The 2008 Business Plan provided information on financial and economic studies that had been developed.

The Legislature included in the 2009/2010 Budget Act a requirement that the Authority submit a business plan document to the Legislature by December 15, 2009. Subsequent legislation signed

¹ The following documentation has been publicly available on the Authority's website: California High-Speed Train Business Plan (November 2008); Business Plan 2008 Source Documents (November 2008); 2009 Business Plan Report to the Legislature (December 2009); Addendum to the California High-Speed Rail Authority's Report to the Legislature (April 2010).

into law requires the Authority to submit a revised business plan to the Legislature every 2 years. (Public Utilities Code, § 185033.)

The Authority prepared a Business Plan and submitted it to the Legislature in December 2009 (California High-Speed Rail Authority 2009c) to comply with the 2009/2010 Budget Act requirements. The content of the 2009 Business Plan included a general discussion of the HST system and anticipated ridership, revenues, project costs, and financing options. The 2009 Business Plan also included a discussion of risk that could jeopardize the project. The content of the 2009 Business Plan was intended to address the specific issues identified by the Legislature in the 2009/2010 Budget Act and included a section at the end identifying how the required topics were addressed. In April 2010, the Authority submitted to the Legislature an addendum to the 2009 Business Plan with additional information to answer questions and issues raised by the Legislative Analyst's Office and legislative oversight bodies (California High-Speed Rail Authority 2010b).

As required by Public Utilities Code, § 185033, the Authority must submit a Business Plan to the Legislature on or before January 1, 2012, and every 2 years thereafter. The statute identifies the required content of future plans:

"The business plan shall identify all of the following: the type of service the authority anticipates it will develop, such as local, express, commuter, regional, or interregional; a description of the primary benefits the system will provide; a forecast of the anticipated patronage, operating and maintenance costs, and capital costs for the system; an estimate and description of the total anticipated federal, state, local, and other funds the authority intends to access to fund the construction and operation of the system; and the proposed chronology for the construction of the eligible corridors of the statewide high-speed train system. The

business plan shall also include a discussion of all reasonably foreseeable risks the project may encounter, including, but not limited to, risks associated with the project's finances, patronage, right-of-way acquisition, environmental clearances, construction, equipment, and technology, and other risks associated with the project's development. The plan shall describe the authority's strategies, processes, or other actions it intends to utilize to manage those risks."

"In addition to the requirements of subdivision (a), the business plan shall include, but need not be limited to, all of the following elements:

- (A) Using the most recent patronage forecast for the system, develop a forecast of the expected patronage and service levels for the Phase 1 corridor as identified in paragraph (2) of subdivision (b) of Section 2704.04 of the Streets and Highways Code and by each segment or combination of segments for which a project level environmental analysis is being prepared for Phase 1. The forecast shall assume a high, medium, and low level of patronage and a realistic operating planning scenario for each level of service. Alternative fare structures shall be considered when determining the level of patronage.*
- (B) Based on the patronage forecast in subparagraph (A), develop alternative financial pro formas for the different levels of service, and identify the operating break-even points for each alternative. Each pro forma shall assume the terms of subparagraph (1) of paragraph (2) of subdivision (c) of Section 2704.08 of the Streets and Highways Code.*
- (C) Identify the expected schedule for completing environmental review, and initiating and completing construction for each segment of Phase 1.*
- (D) Identify the source of federal, state, and local funds available for the project that will augment funds from*

the bond act and the level of confidence for obtaining each type of funding.

- (E) Identify written agreements with public or private entities to fund components of the high-speed rail system, including stations and terminals, any impediments to the completion of the system, such as the inability to gain access to existing railroad rights-of-way.*
- (F) Identify alternative public-private development strategies for the implementation of Phase 1."*

The statute also requires the Authority to hold at least one public hearing on the Business Plan. (Public Utilities Code, § 185033(b)(2).) Future legislation may alter this requirement.

With respect to comments that suggest that the Authority has not established the business case for high-speed rail, the Authority disagrees. One purpose of the 2005 Statewide Program EIR/EIS was to evaluate the consequences of meeting the State's transportation needs over the coming decades. That document identified the environmental and economic cost of proceeding with a "do nothing" alternative as well as with a "modal alternative" that would expand freeways, airports, and conventional rail systems without high-speed rail. The conclusion of the 2005 Statewide Program EIR/EIS process was that the HST system was a less costly alternative and less environmentally damaging overall.

STANDARD RESPONSE 9**Union Pacific Railroad Issues**

The Authority received many comments related to Union Pacific Railroad (UPRR). Many comments expressed concerns about the safety of locating the high-speed train in proximity to a freight railroad. Numerous comments identified the importance of UPRR's freight operations and expressed concerns about the Authority imposing limits on UPRR's ability to continue to conduct freight operations. Many comments suggest that UPRR's letters to the Authority are evidence that the alternatives in the 2008 Final Program EIR are infeasible, and that the Authority must therefore identify new alternatives that are not proximate to UPRR tracks.

Authority's Planning Approach of Using Existing Transportation Corridors

The Authority's planning for the HST system since 2000 has been consistently based on locating the HST corridor within or adjacent to major existing transportation corridors, such as rail or highway corridors. Prior studies have shown that co-locating linear transportation facilities minimizes environmental impacts. This is particularly the case for minimizing impacts on agricultural lands, biological resources, wetlands and waters, and special-status species and habitats. Co-locating major linear transportation facilities can also help minimize sprawl. These points have been recognized by regulatory agencies such as the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers as important considerations in the Authority's compliance with Section 404 of the federal Clean Water Act. Accordingly, the range of alignment alternatives in the 2008 Final Program EIR were mainly located along (within or adjacent to) rail and highway corridors. The location of the HST system in relation to UPRR freight corridors was one basis for recirculating portions of the 2008 Final Program EIR.

Safety Considerations in Locating HST Facilities Near Active Freight Operations

Safety Clearances: Safety is the Authority's highest priority in designing the HST system. The HST system will be designed in accordance with all applicable federally mandated safety laws and FRA implementing regulations, applicable state safety laws and regulations, and safety policies and procedures of other train systems as may be applicable, including those establishing clearance requirements for track separation, overpass structures, trenching requirements, and similar matters.

Equipment Standards: The HST system will operate trains approved for operation in the California HST system by FRA. Current FRA regulations include equipment safety standards for passenger trains operating at speeds up to 150 miles per hour (mph). FRA is reviewing European and worldwide equipment standards and developing guidance for HSTs operating at up to 220 mph. FRA is also exploring improvements and expansions to vehicle and track safety standards through rulemaking. In its *High-Speed Passenger Rail Safety Strategy* (Federal Railroad Administration 2009b), the FRA explains in some detail the safety standards that are under review and asserts that FRA will issue proposed and final rules on these safety standards "as soon as possible" (Federal Railroad Administration 2009b). In addition, the FRA will consider petitions to waive certain equipment standards on a case-by-case basis as necessary or appropriate to the circumstances. A recent example of this is the FRA ruling granting Caltrain a waiver to operate non-FRA-compliant passenger rail equipment between San Francisco and Gilroy (Peninsula Corridor Joint Powers Board 2009, Cothen pers. comm. 2009).

Rule of Particular Applicability: In addition to these rules that will be generally applicable to high-speed passenger trains, the FRA has indicated its expectation that each HSR operation will be

“appropriately tailored to its operating environment” through adoption of a separate rule of particular applicability (RPA) for each HST operation. The Authority is preparing a detailed technical memorandum to support its application for an RPA and intends to make such application at an appropriate time. The Authority’s petition for an RPA and the technical assumptions underlying the RPA will be available for review and public comment prior to any formal action by the FRA. Consistent with FRA’s strategy document, the Authority anticipates that the RPA will consider crashworthiness, crash energy management, vehicle suspension systems, brake systems, train configurations, and other elements critical for high-speed trainsets. The RPA petition may also identify when particular measures, such as barriers or intrusion detection devices, might be may be appropriate to particular operating environments.

Freight Operations

The Authority acknowledges the importance of safe and efficient freight service to the state and national economies. The Authority is engaging in discussions with freight operators to review current and future projected operating needs and to establish a collaborative environment for considering those needs in the project context. As the design of the HST system advances to include more detail during the project phase, the Authority will be in a better position to define with specificity how much, if any, of a freight railroad’s nonoperating property may be necessary for the HST system. At that time, the Authority, in cooperation with the railroad and regulatory authorities will assess whether the intended use of railroad property would unreasonably interfere with railroad operations and whether the intended use of railroad property poses an undue safety risk. The Authority will consider all reasonable alternatives to accommodate and/or mitigate the railroad’s needs within program constraints. The Authority is committed to working through all such railroad issues on a good faith basis.

Feasibility of Pacheco Pass and Altamont Pass Network Alternative in Light of UPRR’s Position on Its Right-of-Way

UPRR has objected to the use of its right-of-way—including corridors through both the Pacheco Pass and the Altamont Pass—to support the HST project. Through the Program EIR process, the Authority has explored alternatives for both the Pacheco Pass and the Altamont Pass that are located along existing transportation corridors, including along UPRR freight corridors. The Revised Draft Program EIR, Chapter 3, provides information and analysis that clarifies the greater land use and property effects which would result from an alignment for the HST system that must be located adjacent to, rather than within, UPRR right-of-way. At the program level, both Pacheco Pass and Altamont Pass network alternatives remain feasible. There is precedent for UPRR working with proponents of commuter rail to reach mutually agreeable arrangements for passenger rail near UPRR freight rail (Union Pacific 2009a, Union Pacific 2009b). Options are available in the freight/commuter rail context to address freight concerns about liability (Elliott pers. comm. 2009, Government Accountability Office 2009). Although the commuter rail context is not fully analogous to the high-speed rail context, there is precedent developing for freight rail carriers reaching agreements with high-speed rail project proponents to facilitate planning and design of HST system that respect and protect the needs of freight rail (CSX Transportation and New York State Department of Transportation 2010, Shipman 2009).²

Cooperative Efforts on High-Speed Rail in California

The Authority has had productive meetings with UPRR representatives on more than one occasion since receiving their April 23, 2010 comment letter. These discussions have been very preliminary and include discussions regarding the possibility for track clearance waivers in limited constrained areas. The Authority appreciates the opportunity to work with UPRR to refine these areas

² See also HSRA Board (item 4) and Exec/Admin Committee (item 6) meeting materials regarding work with Burlington Northern Sante Fe Railroad Company, May 2010

in good faith. The Authority looks forward to additional meetings with UPRR to improve the nature and quality of dialogue between

the parties during the course of project development.

STANDARD RESPONSE 10**Alternatives**

The Authority received many comments expressing very strong views about the alternatives. Numerous commenters expressed their opinion that the Authority was required to start afresh with its alternatives evaluation. Other commenters expressed their opinion that the no project alternative, an Altamont Pass alternative, or a Pacheco Pass alternative should be selected. Many commenters identified additional alternative that they identified as ones that the Authority should or must study to comply with CEQA. This response is intended to provide an overview of the range of comments received on alternatives and the range of options recommended for study in the comments.

The Authority's Actions to Comply With the Town of Atherton Judgment and Identification of a Staff Recommended Preferred Alternative in the Revised Draft Program EIR.

In July 2008, after certifying the 2008 Final Program EIR, the Authority selected the Pacheco Pass Network Alternative serving San Francisco via San Jose (including a shared use Caltrain Corridor between San Jose and San Francisco) as the preferred network alternative for connecting the HST system between the Bay Area and Central Valley. The 2008 Final Program EIR has been revised in response to the Superior Court judgment in the Town of Atherton case. To comply with that judgment, the Authority rescinded its certification of the 2008 Final Program EIR and its approval of the Pacheco Pass Network Alternative serving San Francisco and San Jose. In March 2010, the Authority circulated for public review and comment, the 2010 Revised Final Program EIR. This document responded directly to the Superior Court judgment in the Town of Atherton case, offering additional information and clarification in direct response to the issues identified in the judgment that required further work to comply with CEQA.

The Revised Final Program EIR, which includes the entire 2008 Final Program EIR and the 2010 Revised Program EIR, provide a description and evaluation of a "no project" alternative and 21 representative network alternatives that fall into three groups for linking the Bay Area to the Central Valley: Altamont Pass (11 network alternatives); Pacheco Pass (6 network alternatives), and Pacheco Pass with Altamont Pass (local service) (4 network alternatives). The Program EIR also included alignment options within the representative network alternatives. The Revised Final Program EIR applies consistent evaluation methods and criteria to the study area and network alternatives reviewed.

During the entire program EIR process for the Bay Area to Central Valley, the Authority has been guided by the adopted objectives and criteria for evaluation of alignment and station location options as described below and included in the 2005 Statewide Program EIR and the 2008 Final Program EIR.

In consideration of these objectives and criteria, in Chapter 7 of the 2010 Revised Draft Program EIR, the Authority staff recommended the Pacheco Pass Network Alternative serving San Francisco via San Jose (including a shared use Caltrain Corridor between San Jose and San Francisco) as the preferred network alternative and provided the underlying reasons for the recommendation.

High-Speed Train 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

Although not meant to be an exhaustive list, some major reasons for the continued recommendation of the Pacheco Pass Network Alternative serving San Francisco via San Jose as preferred are summarized below and discussed in full in Chapter 7 of the 2010 Revised Final Program EIR:

- Maximizes the use of existing publicly owned rail right-of-way through shared-use with improved Caltrain commuter services.

The HST is complementary to Caltrain and would share tracks with express Caltrain commuter rail services. This is supported by the Peninsula Corridor Joint Powers Board (PCJPB - Caltrain).

- Provides direct (all HST trains) service to the two largest cities in northern California – San Jose and San Francisco, including the major transit, business, and tourism center in downtown San Francisco. Provides direct service to northern California’s major hub airport at SFO.
- Does not require that HST trains be divided into two directions to serve two city centers. Dividing the trains in two directions reduces the number of trains serving each of the termini stations.
- Provides good HST access for the three-county Monterey Bay area with a south Santa Clara HST station.
- Does not involve a new bay crossing and its associated costs and environmental impacts, including impacts on the federal Don Edwards San Francisco Bay National Wildlife Refuge.
- Is the corridor likely to include the Least Environmentally Damaging Practicable Alternative (LEDPA), as identified by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers.

The additional information in the 2010 Revised Draft Program EIR did not alter the prior staff recommendation in the 2008 Final Program EIR. The identification of the staff recommendation of a preferred alternative in the Revised Draft Program EIR has provided an opportunity for extensive public comment on the recommendation. The Authority has received extensive comments on the staff recommendation of the preferred alternatives, including commenters’ recommendations for what alternative should be selected. Many commenters advocate the “no project” alternative be selected. A very large number of commenters, including many Peninsula cities and residents, advocate for an Altamont Pass alternative. Numerous commenters also support the preferred Pacheco Pass network alternative.



Suggestions in Comments for the Study of Additional Alternatives

At the same time that commenters consistently offered their views of the appropriate alternatives choice, a number of comments received on the 2010 Revised Draft Program EIR also suggested that the Authority should, or is required to, study and consider various alternatives in addition to those evaluated in the 2008 Final Program EIR and the 2010 Revised Draft Program EIR. The suggested alternatives varied in their level of development from a mere sentence (consider a high-speed bus alternative instead) to a thick report (Setec Ferroviaire report). In brief, the suggested additional alternatives include:

- An alignment terminating the HST in San Jose—see “Termination at San Jose” below.
- Altamont alignments and not the Caltrain Corridor—see “Altamont and Not the Caltrain Corridor” below.
- Use of U.S. 101 north of San Jose—see “U.S. 101 North of San Jose” below.
- Use of Interstate 280 (I-280) north of San Jose—see “I-280 North of San Jose” below.
- A proposal to use an Altamont Alignment generally along State Route 84 through the east bay, across the San Francisco Bay, and along the west coast of the San Francisco Bay north of Dumbarton Bridge – see “Other Altamont Corridor Alternatives” below
- A proposal prepared by Setec Ferroviaire titled, *Evaluation of an Alignment for the California High-Speed Rail Project Bay Area to Central Valley Segment*, April 25, 2010 – see “Other Altamont Corridor Alternatives” below
- Vertical profile alternatives (primarily below-grade options such as trench or tunnel) – see “Alignment Profile Alternatives” below.

An often repeated rationale in the comments is that additional alternatives must be studied because the Authority’s prior alternatives have been rendered infeasible based on UPRR’s position denying use of its right-of-way for high-speed rail.

The judgment in the Town of Atherton case did not find fault with the range of alternatives studied in the 2008 Final Program EIR, or require additional study of alternatives. CEQA requires that an EIR study alternatives to the proposed project, or to the location of the proposed project, that are capable of reducing environmental impacts and still accomplish most project objectives. CEQA Guidelines section 15126.6 states: “The EIR must study a reasonable range of potentially feasible alternatives, but is not required to study every alternative suggested or numerous similar alternatives that would not reduce significant environmental effects.”

The Superior Court concluded that the 2008 Final Program EIR met the standard of studying a reasonable range of alternatives and also found that it presented a fair and unbiased analysis. (See the 2010 Revised Final Program EIR, Appendix A, p. 17.)

The 2010 Revised Final Program EIR presents additional information and analysis in response to areas noted by the Superior Court as needing additional work under CEQA. In this new material there is no change to the identified preferred alternative and there is no change to the conclusion that the various alignments for the HST project that are studied in the Program EIR are potentially feasible. Accordingly, neither the court’s ruling, nor the additional study in the Revised Draft/Final Program EIR, result in a requirement to expand the analysis of alternatives, as various comments suggest.

Overall, the suggested additional alternatives either do not satisfy the project objectives and underlying project purpose, would be infeasible for other reasons, or are similar to alternatives already considered and do not provide any significant reduction in environmental impacts so as to warrant their consideration.

Alternative Terminating in San Jose

The 2008 Final Program EIR evaluates alternatives that would terminate in San Jose and not travel up the Peninsula on the Caltrain Corridor. These alternatives included:

- Altamont Pass Network Alternative with Oakland and San Jose Termini
- Altamont Pass with San Jose Terminus
- Altamont Pass with San Jose, Oakland and San Francisco via Transbay Tube
- Pacheco Pass with Oakland San Jose Termini
- Pacheco Pass with San Jose Terminus
- Pacheco Pass with San Jose, Oakland, and San Francisco via Transbay Tube
- Pacheco Pass with Altamont Pass (local service) with Oakland and San Jose Termini, and
- Pacheco Pass with Altamont pass (local service) with San Jose Terminus.

The description and full evaluation of these network alternatives were not recirculated in the 2010 Revised Draft Program EIR Material, but clarification of the description and evaluation of portions of these alternatives, specifically between San Jose and Gilroy, were provided in response to the Superior Court ruling in Town of Atherton case.

The Authority notes that for these network alternatives, there is reduced opportunity for transfer between the HST and Caltrain with the loss of potential HST stations north of San Jose and the reduced utility of using Caltrain as a feeder to HST north of San Jose.

The Authority Board will make a new decision on a network alternative to carry into the project level environmental documents. The alternatives that terminate in San Jose are not the staff recommended network alternative (identified and discussed in Chapter 7 of the 2010 Revised Program EIR Material or the Revised

Final Program EIR) but will be considered by the Authority as part of the new decision. Public comments supporting terminating HST service in San Jose will be part of the record that the Board considers.

Altamont and Not the Caltrain Corridor

As stated above, the 2008 Final Program EIR evaluates alternatives that would terminate in San Jose and not travel up the Peninsula on the Caltrain Corridor. In addition, five of the Altamont network alternatives include HST in some or all of the Caltrain Corridor north of San Jose:

- Altamont Pass - San Francisco and San Jose Termini
- Altamont Pass - San Francisco, Oakland, and San Jose Termini
- Altamont Pass - San Francisco Terminus
- Altamont Pass - San Francisco and San Jose—via San Francisco Peninsula
- Altamont Pass - San Francisco, San Jose, and Oakland—no SF Bay Crossing

An analysis of eleven alignments that do not traverse the Caltrain Corridor at all is contained in the 2008 Final Program EIR. The description and full evaluation of these network alternatives were not recirculated in the 2010 Revised Draft Program EIR Material, but clarification of the description and evaluation of portions of these alternatives, specifically between San Jose and Gilroy, were provided in response to the Superior Court ruling in Town of Atherton.

The Authority notes that for these network alternatives, there is reduced opportunity for transfer between the HST and Caltrain with the loss of potential intermediate stations between San Jose and San Francisco and the reduced utility of using Caltrain as a feeder system to/from HST north of San Jose.

The Authority Board will make a new decision on a network alternative to carry into the project level environmental document. The alternatives that do not traverse the Caltrain Corridor are not

the staff recommended network alternative (identified and discussed in Chapter 7 of the 2010 Revised Program EIR I and Revised Final Program EIR), but will be considered by the Authority as part of the new decision. Public comments supporting network Alternatives that do not use the Caltrain Corridor will be part of the record that the Board considers.

U.S. 101 North of San Jose

The Superior Court in the Town of Atherton case held the Authority had substantial evidence supporting the elimination of the U.S. 101 alignment alternative from study in the 2008 Final Program EIR. See Appendix A of the 2010 Revised Draft Program EIR Material (page 19).

The Authority and the FRA considered a potential HST alternative along U.S. 101 between San Francisco and San Jose as part of the Statewide Program EIR process and the Bay Area to Central Valley Program EIR process. As noted in Table 2.5-4 of the 2008 Final Program EIR (page 2-43), the U.S. 101 alternative was screened out from further study in the program environmental documents. As shown in the table, principal reasons for rejection of these alignments included construction, right-of-way, and environmental concerns, particularly visual and land use (right-of-way acquisition) impacts. Please also see Appendix 2-G1.1 in the Final Program EIR for a discussion of alignment alternatives and station location options eliminated from further consideration.

The US-101 Alignment from San Francisco (Transbay Terminal or 4th and King Terminal Station) would follow the US-101 freeway south to San Jose and would use an exclusive guideway. This exclusive guideway alignment would likely require construction of an aerial guideway adjacent to and above an existing active freeway facility while maintaining freeway traffic. In addition, limited right-of-way would require the extensive purchase of additional right-of-way and a nearly continuous aerial structure between San Francisco and San Jose.

The US-101 alignment alternative would require many sections of high-level structures to pass over existing overpasses and connector

ramps. With overcrossings about every 1.5 miles, the HST will need to run approximately 45 to 50 feet above grade for the length of the freeway median alignment. This proposed elevation assumes the following:

- The elevation of overcrossings over the freeway is about 20 feet. Another 15 to 17 feet is required clearance above the overcrossing. The depth of the spans for the HST viaduct to the top of rail will be 10 to 15 feet.
- A vertical alignment that rises and falls for each overcrossing would produce a substandard condition for 125 mph operations.
- Higher interchanges, such as SR 92 would involve much higher viaduct sections to clear flyover ramps.

An elevated HST line above the Millbrae Avenue overcrossing and I-380 interchange would require further analysis to determine if they intrude into the FAA airspace at the end of the SFO runways, which would be a potential fatal flaw to HST above the median of US-101 in the vicinity of SFO. Similar analysis would be necessary for the San Carlos airport and Moffett Field. The aerial structures would introduce a major new visual element along the US-101 corridor that would have visual impacts (intrusion/shade/shadow) on the residential portions of this corridor. In addition, the existing freeway has substandard features (e.g., medians and shoulders) in many places, and it would be unlikely that Caltrans would agree to use available right-of-way for HST facilities, reserving that space for future improvements to the freeway.

For these reasons, the US-101 corridor was rejected and is not a practicable alternative for HST service between San Jose and San Francisco.

I-280 North of San Jose

The Superior Court in the Town of Atherton case held the Authority has substantial evidence supporting the elimination of I-280 alignment alternative from study in the 2008 Final Bay Area to Central Valley Program EIR. See Appendix A of the 2010 Revised Draft Program EIR Material (page 19).

The Authority and the FRA considered a potential HST alternative along I-280 between San Francisco and San Jose as part of the Statewide Program EIR process and the Bay Area to Central Valley Program EIR process.

As noted in Table 2.5-4 of the 2008 Final Program EIR (page 2-43), the I-280 alternative was screened out from further study in the program environmental documents. As shown in the table, principal reasons for rejection of these alignments included construction, right-of-way, and environmental concerns, particularly visual and land use (right-of-way acquisition) impacts.

I-280 is adjacent to protected watersheds for over 10 miles, in places bisecting the watershed. It is designed to support approximately an 80 mph automobile design speed, with grades greater than those allowable for HST, and 7 miles longer from Transbay Terminal in San Francisco to Diridon Station in San Jose.

The Authority notes that, if there would be no opportunity for transfers between HST and Caltrain except at the San Francisco terminal and San Jose Station, and the utility of using Caltrain as a feeder to HST would be substantially reduced. Caltrain passengers would need to travel to one end or another of the Caltrain corridor to access HST.

The Authority and FRA revisited this alignment alternative and have affirmed that the previous conclusions that this alternative was not practicable.

An I-280 Alignment from San Francisco (Transbay Terminal or 4th and King Terminal Station) would follow south along the I-280 freeway alignment to San Jose and be on an exclusive guideway. This exclusive guideway alignment would have major construction issues involving the construction of an aerial guideway adjacent to and above an active existing freeway facility while maintaining freeway traffic. Limited right-of-way in this corridor would require the extensive purchase of additional right-of-way and nearly exclusive use of an aerial structure between San Francisco and San Jose. The portion within the City and County of San Francisco is fully developed, and connecting the alignment alternative to Diridon

Station in San Jose would require a guideway passing through developed portions of downtown San Jose. These areas would require considerable property acquisition.

An I-280 alignment alternative would require many sections of high-level structures to pass over existing overpasses and connector ramps (in particular at interchanges with State Routes 17/880, 85, and 92) resulting in high construction costs and constructability issues that would make this alignment alternative impracticable. This alignment alternative would also require relocating and maintaining freeway access and capacity during construction. The aerial structures would introduce a major new visual element along the I-280 corridor that would have visual impacts (intrusion/shade/shadow) on the residential portions, nature preserves, and scenic areas for this alignment alternative. The considerable earthwork and retaining walls needed as the freeway traverses the rolling hills of the peninsula would have potentially significant impacts to nature preserves and adjacent residential neighborhoods. The I-280 corridor would not allow a convenient connection to San Francisco International Airport. For these reasons, the I-280 alignment alternative was rejected and would not be a practicable alternative for HST service between San Jose and San Francisco.

Other Altamont Corridor Alternatives

SR-84/South of Livermore Alignment Alternative

Several alternatives from the East Bay to the Central Valley were considered as part of the Bay Area to Central Valley Program EIR process. As noted in Table 2.5-4 of the 2008 Final Program EIR (page 2-43), SR-84/South of Livermore Alignment Alternative and the SR-84/I-580/UPRR Alignment Alternative were screened out from further study in the program environmental documents. As shown in the table, principal reasons for rejection of these alignments included Natural resources, habitat and endangered species, agricultural lands, water resources impacts. Please also see Appendix 2-G1.4 in the Final Program EIR for a discussion of alignment alternatives and station location options eliminated from further consideration.

SR-84/South of Livermore Alignment Alternative would extend east near the UPRR alignment alternative through Niles Canyon then follow the SR-84 corridor south of Pleasanton and Livermore and continue east (south of Livermore) to the Patterson Pass corridor and to Tracy. Station location options include the Pleasanton (I-680/SR-84) station or Livermore (South Isabel).

The SR-84/South of Livermore alignment alternative was eliminated from further investigation because it would have high potential impacts to the natural environment and to agricultural lands. This alignment alternative would cut through agricultural areas and undeveloped conservation easements, increasing habitat fragmentation. The SR-84/South of Livermore alignment alternative would have greater potential impacts to high value aquatic resources and threatened and endangered species than other alignment alternatives through the Tri-Valley (Livermore, Pleasanton, and Dublin) area.

There are several state and federal Endangered Species Act concerns associated with the SR- 84/South of Livermore alignment alternative. Due to the more undeveloped setting of this alignment alternative, there is a higher likelihood of adverse effects to protected species including California tiger salamanders, California red-legged frog, San Joaquin kit fox, Alameda whipsnakes, and listed branchiopods (fairy shrimp).

The SR-84/South of Livermore alignment alternative would by-pass the existing urbanized areas of Livermore, Pleasanton, and Dublin and is remote with respect to the existing BART and Altamont Commuter Express routes. As such, it would not be feasible to provide regional or longer-distance services which would provide convenient access to downtown Livermore or Pleasanton. Candidate station location options along this segment would not support transit-oriented development as well as downtown stations. Development of a transfer point with BART on the SR-84/South of Livermore alignment alternative would not be feasible without a significant extension of the BART line.

SR-84/I-580/UPRR Alignment Alternative was eliminated from further investigation because it would have high potential impacts to the

natural environment and agricultural lands. This alignment alternative would have the same issues as presented for the SR-84/South of Livermore alignment alternative (see above).

Setec Ferroviaire Alternative

An Altamont Pass alternative is described in Exhibit C to comment letter O012, an April 25, 2010, report by Setec Ferroviaire entitled "Evaluation of an Alignment for the California High-Speed Rail Project Bay Area to Central Valley Segment." Although the Superior Court in the Town of Atherton case did not require the Authority to study further alternatives, we have carefully evaluated the proposed Altamont Pass alternative in this report. Response to comment O012-11 summarizes our observations on what we will refer to as the "Setec Alternative." The Setec Alternative described in Exhibit C involves: (1) Altamont Pass to Fremont; (2) routes through Fremont; (3) a San Jose connection from Fremont; (4) a crossing of the Bay at Dumbarton and line to a junction at Redwood City; and (5) and possible use of Highway 101 from Redwood City to South San Francisco.

The Setec Alternative makes certain trade-offs that do not offer any significant benefit above alignment and network alternatives studied as part of the 2008 Final Program EIR for Altamont. In most locations, the alignments share the same characteristics:

- There is a crossing of San Francisco Bay at Dumbarton.
- Newark and Fremont must be crossed using a rail or utility corridor
- Tunneling is required between Fremont and the I-680 corridor near Pleasanton/Sunol
- A new crossing of Altamont or Patterson Pass is made
- Tracy is crossed on/near a UPRR right-of-way (it is unclear in Exhibit C but the alignment shown on Plan 5, while it ends at I-580, it is aligned to meet the UPRR line running south of Tracy)

The alignment characteristic that differs between those studied in the 2008 Final Program EIR and Setec Alternative is how the alignments differ in their path in the area of Pleasanton and

Livermore. The CHSRA alignment alternatives follow existing transportation corridors, either I-680 and I-580 or the UPRR. The Setec Alternative attempts to follow a powerline corridor, but that corridor is in a rural and agricultural area. The impacts and benefits of the CHSRA alignments in urbanized areas are traded for the Setec Alternative's impacts and benefits of a rural alignment. Evidence of some of the obvious potential impacts of Setec Alternative's alignment have been presented above. There is no benefit that stands in favor of the entire alignment verses the Altamont alignments already considered in the 2008 Final Program EIR.

Given that the tangible differences between the Altamont alignments studied in the 2008 Final Program EIR and the Setec Alternative are small, we do not believe the Setec Alternative alters the basic comparison between Altamont Pass and Pacheco Pass network alternatives that serve both San Francisco and San Jose. We do not believe the Setec Alternative merits further consideration.

Alignment Profile Alternatives

The Authority Board committed in July 2008 to investigate profile alternatives to avoid and minimize potential impacts, including

trench, tunnel, aerial, and at-grade. Although the Authority has rescinded its July 2008 program decision, the commitment to examine profile alternatives has been carried forward into the project level alternatives screening.

However, the precise alignment and profile options for the HST system in the Caltrain Corridor is being further evaluated and refined as a part of the ongoing preliminary engineering and project-level environmental review. Use of a trench or tunnel concepts in sensitive areas or where it is an appropriate and necessary design option is being further evaluated with more detailed study during this phase. Some of the criteria for the evaluation would include overall ground footprint, potential right-of-way (ROW) requirements, environmental impacts, constructability and construction methods, costs, as well as community cohesion (access across existing corridor). The process will also provide an opportunity for the communities and cities to comment and provide feedback.

Caltrain Service and Corridor Issues

Caltrain has stated that its future as a viable commuter rail system is dependent on funding associated with the HST. Voter approval of the State's first HST system, and the subsequent creation of the Peninsula Rail Program, will ensure the realization of these critical improvements to the Caltrain system in conjunction with the implementation of the HST. In addition, Caltrain will benefit from the creation of a fully grade-separate right of way, allowing trains to operate more safely by eliminating at-grade traffic and pedestrian crossings.

The PCJPB owns the Caltrain right-of-way. The Authority and PCJPB have negotiated a memorandum of understanding (MOU) to work together on the corridor and to develop a "single vision" for the corridor moving forward into the future. The MOU was approved by the California High Speed Rail Authority Board on March 5, 2009, and by the PCJPB on April 2, 2009. The purpose of this agreement is to establish an initial organizational framework whereby CHSRA and PCJPB engage as partners in the planning, design and construction of improvements in the Caltrain Rail Corridor that will accommodate and serve both the near-term and long-term needs of CHSRA intercity high speed rail service and PCJPB commuter rail rapid transit service.

Caltrain and high-speed trains must be able to operate on the same tracks at the same time. In the 2008 Final Program EIR a typical configuration was assumed consisting of the two inside tracks for HST and Caltrain express service operating at compatible speeds and the outside tracks for Caltrain local service and temporally separated freight service. The shared four-track system enables express service to pass local service at each station and maintains schedule reliability. The shared tracks also enable the HST to run fast express service between SF and Jose to achieve 30 minute travel times and provide high frequency service. The Federal Railroad Administration prohibits "mixed traffic" – operating standard American trains and lighter rail equipment on the same tracks. However, Caltrain has received a waiver from the FRA. To avoid collisions, Caltrain will use an enhanced signal system that includes federally mandated Positive

Train Control to prevent trains from colliding with each other, with other vehicles or with fixed objects. In addition, Caltrain equipment will use the latest Crash Energy Management technology to distribute or "manage" the energy from a collision, protecting the passengers onboard the train. The waiver allows Caltrain to operate all passenger trains, whether diesel or electric, to run on the same tracks. The Authority will have to seek its own waiver, but the Caltrain waiver is a clear precedent that should help the Authority's waiver request succeed.

As noted in the 2008 Final Program EIR, Caltrain is viewed as complimentary feeder system to the HST system. The Program EIR identified shared stations in San Francisco at the Transbay Terminal, the Millbrae Caltrain / BART station (to serve SFO), a potential station at Palo Alto or Redwood City, Diridon Station in San Jose, and the Gilroy Caltrain station. This distribution of stations along the Caltrain corridor would enable a short trip from any Caltrain station to connect to the HST at a joint station, expanding convenient access to the HST along the Caltrain system.

Overall, the HST system would improve inter-modal connectivity with local and commuter transit systems. Prop 1A ensures that complementary rail capital improvements would be funded by a \$950 million portion of bond funds. These funds must be allocated to intercity, commuter and urban rail systems and shall provide direct connectivity and benefits to the high-speed train system and its facilities or be part of the construction of the system.

Construction impacts associated with the implementation of the HST and improvements to the Caltrain infrastructure would be a topic analyzed at the project-level to create a plan to mitigate potential operational impacts to Caltrain's service during the construction period.