

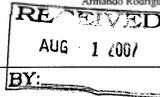
Comment Letter O001 (Gary A. Patton, Planning and Conservation League, July 27, 2007)

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O001

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July 27, 2007

California High-Speed Rail Authority, EIR/EIS Comments  
925 L Street, Suite 1425  
Sacramento, CA 95814

RE: Preliminary Comments - Bay Area to Central Valley High-Speed Train Program EIR/EIS

Dear Ladies and Gentlemen:

I have an immediate, preliminary comment on the Bay Area to Central Valley High-Speed Train Program EIR/EIS. The study recently released for public comment outlines the various alternatives for the Altamont and Pacheco alignments, but does not include an analysis of regional rail ridership for the Sacramento-Stockton-Pleasanton-San Francisco-San Jose corridor. This is a fatal deficiency, and must be corrected. Failure to include these data (and an analysis of these data) makes the EIR/EIS document inadequate.

Analyzing commuter/regional rail ridership in the Sacramento-San Jose/San Francisco corridor is essential to this study, because there would likely be on the order of millions of annual riders in the corridor utilizing commuter rail options. Increasing commuter rail in the corridor can lead to a significant reduction in traffic congestion and air pollution. The impacts of commuter rail **MUST** be analyzed and taken into account as a High Speed Train alignment is selected.

O001-1

As it turns out, MTC is in the process of developing the data needed. If they weren't (or if for some reason they don't), the High Speed Rail Authority would have to develop the data independently, to prepare an environmental document that would comply with the requirements of CEQA and NEPA. The bottom line is that the EIR/EIS for the Bay Area to Central Valley High-Speed Train Program must include a review and analysis of the data on potential commuter rail ridership.

This letter is our official request that you withdraw the current draft, and then reissue an amended draft, for public review and comment, when the appropriate data are included and analyzed as part of the environmental analysis that CEQA and NEPA require.

O001-2

Thank you for your attention to this serious concern.

Very truly yours,

Gary A. Patton, Executive Director  
Planning and Conservation League

cc: Interested Persons

1107 9th Street, Suite 360, Sacramento, CA 95814 Phone: 916-444-8726 Fax: 916-448-1789  
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U.S. Department  
of Transportation  
Federal Railroad  
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**Response to Letter O001 (Gary A. Patton, Planning and Conservation League, July 27, 2007)**

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**O001-1**

The California High-Speed Rail Authority (Authority) and the Federal Railroad Administration (FRA) find the information regarding potential impacts, benefits, costs, ridership, and operations of the high-speed train (HST) system to be fully consistent with the requirements of National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) and adequate to identify key differences among the alignments and station location options. The Authority and FRA find that recirculation of the document is not warranted.

**O001-2**

Comment acknowledged. Please see Response to Comment O006-3 and Standard Responses 1 and 2.



Comment Letter O002 (Eugene K. Skororpowski, Capitol Corridor Joint Powers Authority, September 14, 2007)

SEP. 17. 2007 10:30AM CAPITOL CORRIDOR 4040901

NO. 4242 P. 2/3

O002



September 14, 2007

Mr. Steve Heminger  
Executive Director  
Metropolitan Transportation Commission  
101-8<sup>th</sup> Street  
Oakland, CA 94607

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www.capitolcorridor.org

SUBJECT: MTC Regional Rail Plan

Dear Mr. Heminger:

The Capitol Corridor Joint Powers Authority (CCJPA) is proud to be a participant in MTC's *Regional Rail Plan*. It was pleasure to be a member of the project team, which included all the rail agencies in the Bay Area. The participation of these many rail agencies was a great feat coordinated by MTC and represented the depth and thought that went into the development of the Plan.

The Plan presents a bold vision for the rail transportation network in the Bay Area for both freight and passenger services. As current and future operators of rail services in the Bay Area, we all know that the services that exist today cannot move forward independently. The Plan attempts to integrate the rail services into a future rail network that would rely on the development of intermodal facilities that will bring the different types of rail services (commuter, intercity, and high-speed rail) together at strategic locations in the Bay Area.

The CCJPA especially appreciates the work done by MTC and its consultant team in the development and integration of the Capitol Corridor into the Plan. Specifically, the CCJPA is pleased with the Plan's forecast for the Capitol Corridor, which aligns with the CCJPA's *Vision Plan* (April 2005). Some highlights include improved frequencies, maximum utilization of the route and resources, comprehensive market penetration (both business and leisure travelers), and a cooperative operating service plan with freight trains.

The CCJPA supports in principle the concept of the two high-speed rail alignments into and out of the Bay Area. Each alignment would provide a means to meet the high-speed rail 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 CCJPA would also like to encourage MTC to incorporate projects in the Plan that would be financed through Proposition 1B funds, especially Trade Corridor Improvement Funds. These Proposition 1B projects should be seen as incremental improvements that will be part of the vision presented in the Plan.

O002-1

O002-2

O002-3

O002-4

O002-5

Mr. Steve Heminger  
September 10, 2007  
Page 2

As such, the CCJPA endorses in principle the work products presented in the Plan. We look forward to working with MTC and other interested parties in the implementation and funding strategies put forth in the Plan.

O002-6

Sincerely,

Eugene K. Skororpowski  
Managing Director

cc: CCJPA Board of Directors  
Dorothy Dugger, BART  
Michael Scanlon, Caltrain  
Stacey Mortenson, San Joaquin Regional Rail Commission/ACE  
Jerry Wilmoth, Union Pacific Railroad  
Dan Leavitt, California High Speed Rail Authority  
Doug Kimsey, MTC



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**Response to Letter O002 (Eugene K. Skororpowski, Capitol Corridor Joint Powers Authority, September 14, 2007)**

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**O002-1**

Authority staff were also participants in the Regional Rail Plan, serving on the plan's management committee along with Metropolitan Transportation Commission (MTC), Bay Area Rapid Transit (BART) District, and San Mateo County Transit District (SamTrans). This participation of the Authority provided the opportunity to coordinate the HST with the regional rail planning process and work directly with such major rail agencies in the region as the Capitol Corridor.

**O002-2**

The Authority and FRA agree that integration and coordination of rail services in the region, both freight and passenger, is a critical and an important adjunct to the proposed HST network. Stations identified for Preferred Alternative in this Final Program Environmental Impact Report/Environmental Impact Statement (Final Program EIR/EIS) would all serve as strategically located intermodal facilities providing different types of rail services (commuter, intercity, and high-speed).

**O002-3**

Provision of enhanced Capitol Corridor (Caltrain) Joint Powers Authority (JPA) services and facilities clearly is a critical component of Bay Area regional rail, both today and into the future.

**O002-4**

Support for the concept of two high-speed rail alignments is consistent with the Authority's staff recommendation for Pacheco Pass as the Preferred HST Alternative for long-distance travelers and enhanced regional/commuter services developed by regional rail partners along the Altamont alignments. Please see Standard

Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.

**O002-5**

The Authority and FRA agree that rail improvements in the Bay Area to Central Valley will clearly require a number of funding sources beyond the Authority bond funds.

**O002-6**

The Authority looks forward to working with MTC and other regional rail stakeholders in the development of a regional rail system to serve critical travel markets and complement provision of HST services in the region and throughout the state.



Comment Letter O003 (Traci Verardo-Torres, California State Parks Foundation, September 19, 2007)



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O 003

September 19, 2007

Quentin L. Kopp, Chair
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

Dear Chairman Kopp:

On behalf of the California State Parks Foundation and our 90,000 members statewide, I am writing to request an extension of the public comment period for the Draft Bay Area to Central Valley High-Speed Train (HST) Program EIR/EIS.

The EIR/EIS for route choices for the high-speed rail system from the Bay Area to the Central Valley is an extremely large and complex work product. As you may be aware, the Foundation has previously submitted comments to the draft and final versions of the HST Programmatic EIR. We take the responsibility and obligation for participation in this public process very seriously and require additional time to provide thorough feedback on the Bay Area to Central Valley EIR.

It is critical to consider the HST proposal with respect to existing environmental conditions, including impacts to state park lands within the designated possible routes. As you know, discussion of significant land management, habitat preservation, cultural and biological resource management and noise and visual impacts was deferred from the Programmatic EIR to this project EIR. Given that this document contains important analysis that was previously absent from the program EIR, additional review time is warranted.

Choices about HST will have a lasting effect on the shape of California's transportation system and land planning practices for decades to come. The importance of this Northern California route choice cannot be understated. As such, public input is crucial and I urge the Authority to extend the comment period by 60 to 90 days.

Sincerely,

Traci Verardo-Torres
Director, Legislation and Policy

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EMAIL: calparks@calparks.org WEBSITE: www.calparks.org

O003-1



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**Response to Letter O003 (Traci Verardo-Torres, California State Parks Foundation, September 19, 2007)**

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**O003-1**

In response to public requests such as this, the public comment period was extended from September 28 to October 26, 2007. The Authority and FRA appreciate the California State Parks Foundation sense of responsibility and obligation to participate in this environmental review process.

Please note that this Bay Area to Central Valley Program EIR/EIS is not a project-level EIR/EIS. The Authority and FRA anticipate preparation of a project-level EIR/EIS and preliminary engineering for the Preferred Alternative on completion of the program-level review.

The Authority and FRA agree that HST system choices will have lasting effects on the shape of California's transportation system and land planning practices into the future and understand the critical nature of the HST route selection.



Comment Letter O004 (Alan C. Miller, Train Riders Association of California, September 12, 2007)

**TRAC**  
Train Riders  
Association  
of California

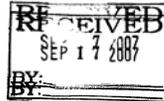
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(916) 557-1667  
trac@omsoft.com



September 12, 2007

Quentin L. Kopp, Board Chairperson  
California High-Speed Rail Authority  
925 L Street, Suite 1425  
Sacramento, CA 95814



O 004

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**Executive Director**

Alan C. Miller

Dear Mr. Kopp:

The EIR/EIS for route choices for the high-speed rail system from the Bay Area to the Central Valley is a large and complex document. The choice made will have a lasting effect on the shape of California's transportation system for decades to come. This in turn will shape the land use and growth patterns of Northern California for all time. The importance of this route choice cannot be understated. As such, the public input is crucial.

0004-1

We originally expected that input from the Bay Regional Rail Plan (BRRP) would be considered as part of the route decision. At this point the value of the data from the BRRP to the route decision is not clear. A decision by MTC based on the BRRP may or may not be made at a meeting just two days before the close of the public comment period for the HSR EIR/EIS.

0004-2

The public comment period for a typical small transportation EIR for, say, a city trolley line, is about 45 days. The high-speed rail project is on the order of 100's of times the expense and geographic extent. As has been stated many times, this could be the single largest public works project in US history. The sheer amount of data that must be absorbed and digested to make meaningful and useful comments on this project requires that the public comment period be extended.

0004-3

In order to digest and make meaningful comments on the EIR/EIS, the public should have more time. We are requesting that the public comment period, currently set to end September 28, 2007, be extended by 60 to 90 days.

Sincerely,

Alan C. Miller, Executive Director

cc: Governor Arnold Schwarzenegger  
Lieutenant Governor John Garamendi  
Fabian Nuñez, Speaker of the Assembly  
Don Perata, President Pro-Tem of the Senate

TRAC, active since 1984, is dedicated to a vision of fast, frequent, convenient and clean passenger rail service for California. We promote these European-style transportation options through increased public awareness and legislative action.



U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

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**Response to Letter O004 (Alan C. Miller, Train Riders Association of California, September 12, 2007)**

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**O004-1**

Please see Response to Comment O003-1.

**O004-2**

Please see Comment Letter L005 from the MTC. In response to comments from the public, including from Train Riders Association of California (TRAC) and MTC, the comment period was extended to October 28, 2007. This time extension allowed MTC to adopt the Regional Rail Plan in advance of the close of comments on the Draft Program EIR/EIS.

**O004-3**

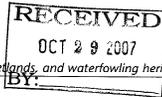
In response to public requests such as this, the public comment period was extended from September 28 to October 26, 2007.



**Comment Letter O005 (M. Robert McLandress, California Waterfowl, October 29, 2007)**



Conserving California's waterfowl, wetlands, and waterfowling heritage.



O 005

**VIA FACSIMILE AND U.S. MAIL**

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

**Re: Bay Area to Central Valley High Speed Rail Alignments**

Dear Mr. Leavitt:

The California Waterfowl Association (CWA), a non-profit conservation organization, strongly opposes the Pacheco Pass High Speed Rail alignment option that either bisects or runs adjacent to the Grasslands Ecological Area (GEA). CWA concurs with the California Department of Fish and Game, United States Fish and Wildlife Service, Grassland Water District, and Ducks Unlimited of the superiority of the Altamont Pass Alignment Route.

O005-1

CWA is a non-profit state conservation organization with over 25,000 statewide members, including 5,000 members located in the Pacheco Pass affected area of Merced and Stanislaus Counties. CWA actively works in the Grasslands Ecological Area for the preservation and restoration of wetland and associated upland habitat.

The GEA is an 180,000 acre ecological area that is comprised of wetland, riparian, and associated grassland habitat that comprises the largest contiguous freshwater marsh in the state of California. The GEA wetland complex winters upwards of one million waterfowl in the fall and winter months and provides breeding habitat for tens of thousands of waterfowl in the spring and summer months. Shorebirds also migrate and winter in the GEA complex and frequently number over 100,000 birds. The total number of species that rely on the GEA complex include over 550 species of plants and animals, which include 47 that are endangered, threatened, or candidate species under state and federal laws.

O005-2

The GEA is nationally and internationally recognized by numerous conservation organizations. The RAMSAR convention, an organization that seeks to protect and preserve wetlands of national and international importance, designates the GEA as a "Wetland of International Importance". The Western Hemisphere Shorebird Reserve Network (WHSRN) has designated the GEA as a "Site of International Importance" for shorebirds. Both the United States Fish and Wildlife Service and California Department of Fish and Game have wildlife areas comprising over 61,500 acres and have committed millions of dollars in the region for the easement protection of private lands. The vast majority of private wetlands are in federal and state easements comprising over 180 different private properties. The easement acquisition protection efforts of private wetlands are the largest in California, if not the nation.



**California Waterfowl Association**

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FAX: (916) 648-1665  
www.calwaterfowl.org

CWA is a 501 (c)(3) nonprofit organization (94-1149574).

The wildlife value of the GEA as the last and largest contiguous block of wetland habitat in California is unquestioned. Any Pacheco Pass Alignment that either bisects the GEA along Henry Miller Road or runs adjacent to the GEA will compromise the value of the GEA to support wildlife.

O005-3

Comments provided by both the California Department of Fish and Game and The United States Wildlife Service provide an excellent synthesis of the specific biological issues that will occur if a Pacheco Pass Alignment is chosen. In summary, any Pacheco Pass Alignment will:

O005-4

- Restrict movements of wildlife and the connections between these habitats
- Encourage growth in areas that are environmentally sensitive
- Have negative impacts on Los Banos Wildlife Area, the oldest WA in the state (Henry Miller Road Option)
- Encourage a future growth inducing train station next to or within the GEA

Because of the environmental sensitivity of the GEA, CWA strongly urges the High Speed Rail Authority to eliminate any Pacheco Pass alignment that would run adjacent or bisect the GEA.

O005-5

Thank you for your consideration of CWA's comments.

Sincerely,

M. Robert McLandress, Ph. D.  
President



U.S. Department of Transportation  
**Federal Railroad Administration**

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**Response to Letter O005 (M. Robert McLandress, California Waterfowl, October 29, 2007)**


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**O005-1**

The Preferred Alternative identified in this Final Program EIR/EIS is the Pacheco Pass Network Alternative, San Francisco and San Jose Termini. Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.

See also Response to Comment Letters F002, F005, F008, S006, L029, and O011.

**O005-2**

Comment acknowledged.

**O005-3**

The FRA and Authority do not agree that the preferred Pacheco Pass Network Alternative adjacent to Henry Miller Road will compromise the value of the Grasslands Ecological Area (GEA) to support wildlife. Refer to Response to Comment S006-5 regarding issues associated with the GEA.

**O005-4**

See Response to Comment Letters F002, F005, F008, and S006.

The preferred Pacheco Pass Network Alternative would include design features and mitigation strategies so as not to restrict movement of wildlife and the connections between these habitat areas. As noted in Section 2.3.2, Design Practices, use of existing transportation corridors would be maximized to avoid or minimize impacts, such as barriers to wildlife movement. Use of transportation corridors includes placing HST alignments either within or adjacent to existing transportation corridors. In addition, HST tracks will be fully grade separated from all roadways, providing other opportunities for wildlife movement corridors. The Authority and FRA are committed to working with the resource agencies in identifying locations along the HST alignments for wildlife movement and in incorporating design features in the HST system to assure

continued wildlife movement. Refer to Response to Comment S006-7 regarding mitigation strategies for wildlife movement.

Growth inducement is discussed in Chapter 5 and Standard Response 4 regarding growth. The HST system has been designed to be primarily co-located with other transportation infrastructure and to be integrated with transit services. Because the HST serves large metropolitan areas with few stations, it would tend to encourage growth in existing urban areas and help to combat sprawl. Through interagency coordination, the FRA and Authority will continue to work with resource agencies to avoid or minimize impacts on environmentally sensitive areas and, where appropriate, mitigate significant impacts.

The FRA and Authority have committed to feasible action to avoid direct impacts on the Los Banos Wildlife Area. This includes investigating site-specific location and design alternatives for the Preferred Alternative and station location options, including avoidance and minimization alternatives, during the Tier 2, project-level environmental review, if the Pacheco Pass Preferred Alternative is approved and selected. This would include evaluating design alternatives to the north and south of the current proposed alignment across the Pacheco Pass and along Henry Miller Road. See Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA. See also Response to Comment F005-2.

The Final Program EIR/EIS does not identify, and the Preferred Alternative does not include, a station in the Los Banos, Gustine, or Santa Nella area. In addition, the Preferred Alternative does not include a site for a fleet storage/service and inspection/light maintenance facility along the Henry Miller alignment alternative in the vicinity of Los Banos. In addition, the HST trackway would not lend itself to inducing growth in unpopulated areas such as along the Pacheco Pass alignment, especially along Henry Miller Road. Please see Standard Response 3 regarding identification of Pacheco Pass as



the Preferred Alternative and discussion of the Los Banos area in Chapter 8 of this Final Program EIR/EIS.

**O005-5**

The Preferred Alternative identified in this Final Program EIR/EIS is the Pacheco Pass Network Alternative, San Francisco and San Jose Termini. Site-specific location and design alternatives for the selected alignments and station location options, including avoidance and minimization alternatives, will be fully investigated during the Tier 2, project-level environmental review. This will include evaluating design alternatives to the north and south of the current proposed Henry Miller alignment (between the Central Valley and the Pacheco Pass), if the Preferred Alternative is selected at the conclusion of this environmental review process. Please also see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.



**Comment Letter O006 (David Schonbrunn, Transportation Solutions Defense and Education Fund, October 25, 2007)**

O 006

TRANSDEF 10/25/07 Page 2

**Transportation Solutions Defense and Education Fund**

P.O. Box 151439 San Rafael, CA 94915 415-460-5260

October 25, 2007  
By E-mail and U.S. Mail

Hon. Quentin Kopp, Chairman  
California High-Speed Rail Authority  
EIR/EIS Comments  
925 L Street, Suite 1425  
Sacramento, CA 95814

Re: Bay Area to Central Valley DPEIR/S

Dear Chairman Kopp:

The Transportation Solutions Defense and Education Fund (TRANSDEF) is a Bay Area environmental organization advocating the regional planning of transportation, land use and air quality. We are especially focused these days on policies that are responsive to the challenge of climate change. We strongly support High Speed Rail (HSR) and see it as likely to become the State's most far-reaching (literally as well as figuratively) climate change mitigation project.

O006-1

The long list of capital projects that need to be built to provide a low-carbon way of life places tremendous pressure on your Authority to economize with this project. Cost-effectiveness in achieving an integrated California High Speed and intercity rail system will be key. That is why the "hybrid" recommendation that MTC adopted yesterday is a total non-starter. Because of its \$5 billion dollars of additional cost, we urge you to discard it from further review as an option, due to its financial infeasibility.

O006-2

TRANSDEF finds this environmental document profoundly unsatisfactory. Major new work will be necessary to make the Bay Area to Central Valley Draft Program Environmental Impact Report/Statement (DPEIR/S) a valid basis for the important decision of selecting an HSR alignment to connect the Bay Area with the rest of California.

O006-3

It is nothing short of inconceivable that an environmental document whose sole purpose is to inform the choice between two competing alignments is silent on the issue of the relative merits of those alignments. In its present form, the DPEIR/S offer no guidance on this weighty question, and doesn't offer even a summary table of benefits and impacts of the two alignments. Hundreds of pages go by without this issue being addressed. Did the EIR preparers think we would be so overwhelmed by the data as to miss this glaring absence? This flaw is so profound as to require revision and recirculation, without ever getting to the substance of our comments.

Comprehensive Rail Network

The capacity of HST facilities is so great that their unused capacity can be used to provide regional and interregional mobility solutions without building additional infrastructure. The Altamont alignment offers the opportunity to provide quality service to three travel markets (Bay Area to L.A., Bay Area to Sacramento, and Bay Area to Central Valley), where the Pacheco alignment only can serve one well. Piggybacking additional services on the same infrastructure enables dramatic capital cost savings.

O006-4

Building an HST line over the Altamont pass will cover most of the capital cost of providing fast, reliable ACE regional and interregional service. If the DPEIR/S cumulative impact analysis were to assume that ACE's future expansion funds were used to purchase rolling stock and operations, ACE would then be able to provide top notch service to Silicon Valley. This in turn would catalyze transit-oriented development in the Central Valley and in Silicon Valley that might otherwise not occur. The cumulative impacts analysis of such a scenario would note the difference between these results and the sprawl development that would occur in Santa Clara, Merced and San Benito Counties if the Pacheco alignment were built-out.

The operating plan assumptions used in the DPEIR/S were silly. The Base Case for the Altamont alignment assumes that only a fraction of the trains from southern California would connect with San Francisco, with the rest going to San Jose. DPEIR/S at S-12. The model then produces a lower ridership estimate for the Altamont alignment, because travel demand models project less ridership when less train service is available. That assumption is the product of a flawed mindset that sees HSR in isolation. HSR needs to be recognized as the backbone of an extensive regional and interregional rail network. Despite the hope that planning would produce a vision for a comprehensive system, TRANSDEF is profoundly disappointed at MTC's mismanagement of the Regional Rail Plan, and its asinine HSR recommendations and final conclusions.

O006-5

Nonetheless, the HSR project cannot be meaningfully evaluated on its own. It is only through the synergistic effects of the regional rail network on the HSR system that HSR will achieve maximal environmental benefits. Modelling HSR without the regional rail network will result in ridership calculations that completely ignore the further objective of HSR: "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." DPEIR/S at 1-4.

Because the level of Bay Area congestion on Highways 80 and 580 is very high, far outstripping conditions in southern Santa Clara County, the Altamont alignment does far more to serve this objective. Ridership calculations done without adding in the regional riders that use the HSR infrastructure are therefore worthless for purposes of determining which alignment produces the maximal social benefits (which should be the determining factor).

The goal should be to build a regional rail network that provides frequent BART-level service around the region, using the excess capacity of the HSR infrastructure.



U.S. Department of Transportation  
**Federal Railroad Administration**

**Comment Letter O006 – Continued**

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Under such a scenario, a train from the southland would be met in Fremont by a train to San Jose, so that, with a platform-to-platform transfer, every train would access San Jose and San Francisco. With regional service assumed like this (or by coupling and uncoupling trainsets), the two alignments will have the same frequency of service. This then will result in meaningful ridership calculations, in which Altamont is sure to have more total riders.

Growth Inducement

We contend the findings of the growth inducement analysis fail to pass the common sense test, and are simply not credible. Peak hour highway conditions between the Bay Area and outlying counties are miserable now and heading towards becoming much worse in 2030. These conditions are represented in the DPEIR/S as the No Project Alternative. They will prevent any kind of substantial expansion of commuting into the Bay Area. Under the Network Alternatives, one would expect Central Valley employment, Table 5.3-2, to drop below the No Project Alternative as Central Valley residents stream onto HSR in search of the Bay Area's higher wages. But it doesn't. Similarly, one would expect Bay Area employment with the Network Alternatives in Table 5.3-2 to increase sharply in relation to the No Project Alternative, as a large pool of lower-cost-of-living employees becomes accessible.

The fact that the growth inducement analysis fails to show a substantial change in employment between the No Project and Network Alternatives indicates that the model considers the travel connection between the Bay Area and the Central Valley to be convenient enough. That finding clashes with everyday traffic reports that always have problems. Given how bad the traffic is now, it is especially egregious that the DPEIR/S concludes that adding HSR does little to change travel patterns, i.e., induce growth. This whole section needs to be redone, starting with accurate traffic counts now and into the future.

Statewide Growth

With urbanized land in the core study area projected to increase by an astonishing 40% between 2000 and 2030 (at 5-12), it is clear that HST and a comprehensive Smart Growth mitigation package could play a dramatic role in reducing the environmental impacts of a projected tremendous increase in population and jobs. In the absence of a State growth management regime, a statewide project EIR serves as a de facto state plan.

The DPEIR/S must propose mitigations for this massive projected increase in sprawl. Mitigations are tested by studying how the alternatives compare to the 2005 baseline, as well as to the No Project Alternative. Mitigations that should be evaluated:

- Drop the planned and funded transportation highway improvements that are assumed in the No Project Alternative. Use the funding to instead build a

O006-5  
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network of intrarregional trains that connect with the HSR network.<sup>1</sup>

- Assume that voters authorize a shift in Proposition 1B Transportation Bond funds from highways to HSR. Calculate the reduction in GHG emissions resulting from building out the HSR system sooner.
- Propose a Blueprint for 2030 for the Project core study area minus the 9 Bay Area counties (which already have a Smart Growth Plan), modelled on SACOG's Blueprint, with higher densities outside and much less conversion of vacant land.
- Propose Indirect Source Mitigation Fees similar to those in place in the San Joaquin Valley, but increase the cost high enough to restrain the growth of large lot subdivisions.
- Assume a \$1.00 increase in the gas tax, with revenues used to fund bus and shuttle operations, following a Constitutional Amendment by voters to authorize transit use of gas tax receipts.

Conclusion

TRANSDEF was very involved in preparing the extensive comments submitted by our attorney, Stuart Flashman. We appreciate this opportunity to provide additional comments to the CAHSRA. We hope that the agency will seriously consider what we have said here, and decide to work on behalf of the people of the State of California to provide the greatest benefit to the greatest number.

Sincerely,

/s/ DAVID SCHONBRUNN

David Schonbrunn,  
President

O006-7  
Cont.

O006-8

<sup>1</sup> For an off-the-shelf set of assumptions to model this scenario, see the TRANSDEF Smart Growth RTP Alternative in MTC's 2005 RTP FEIR, Appendix D.1. All highway funds were transferred to transit projects. Many new bus lines were initiated. HSR was built. The transit network definition files are available from MTC.



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**Response to Letter O006 (David Schonbrunn, Transportation Solutions Defense and Education Fund, October 25, 2007 )**


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**O006-1**

The Authority and FRA acknowledge receipt of comments from Transportation Solutions Defense and Education Fund (TRANSDEF), appreciate TRANSDEF's support for the State's HST system, and agree that the HST system can provide mitigation for climate change by reducing greenhouse gas (GHG) emissions.

**O006-2**

The Authority and FRA agree that cost-effectiveness must be a major consideration for the overall HST system. The Authority and FRA agree with MTC's position that rail improvements are needed throughout the region to serve differing markets and diverse regional geographic areas. The Pacheco Pass Network Alternative has been identified as the preferred alternative, and the Authority is working with the regional partners on a separate project to improve commuter service in the Altamont Corridor. Please note that this approach would require less right-of-way for the Altamont Corridor improvements, reducing the impacts as compared to identifying this corridor for the proposed HST system.

**O006-3**

The Authority and FRA find the information regarding potential impacts, benefits, costs, ridership, and operations of the HST system to be fully consistent with the requirements of NEPA and CEQA and adequate to identify key differences among the alignments and station location options. The Authority and FRA find the information provided is sufficient for the identification of a Preferred Alternative. Please see Standard Responses 1 and 2 and Chapter 8 of this Final Program EIR/EIS.

Relative merits of the alignment and network alternatives are described in Chapter 7. The network benefits and impacts are then

compared in the Summary of the Program EIR/EIS. Please also see Summary Table S.8-1.

The Authority and FRA find that recirculation of the Draft Program EIR/EIS is not necessary.

**O006-4**

Please see Response to Comment O006-2. By design, the HST alignments are proposed to be adjacent to or within existing transportation right-of-way to the extent feasible. At times, however, the rights-of-way are not wide enough to accommodate the number of HST (and at times freight) tracks that are required in the corridor. For example, four HST tracks would be required at station locations. In some locations (e.g., along the Union Pacific Railroad [UPRR] Altamont Alignment), six tracks (four HST and two freight) would be required at the stations. For these locations, additional right-of-way would be required or some of the tracks would need to be placed in tunnel or on an aerial structure.

The land use and aesthetic impacts associated with this circumstance were recognized by representatives of cities along the Altamont Pass alignment (e.g., Fremont, and the Tri-Valley area – Livermore and Pleasanton), which expressed major concerns regarding the impacts of a HST through their jurisdictions. As a result, Tri-Valley communities, represented by the Tri-Valley Policy Working Group and Technical Advisory Committee (i.e., the Tri-Valley PAC—a partnership that includes the cities of Dublin, Livermore, Pleasanton, Danville, San Ramon, and Tracy along with transportation providers Livermore Amador Valley Transit Authority [LAVTA], Altamont Commuter Express [ACE], and BART) supported a concept of improving commuter rail services in the Altamont Corridor in concert with a Pacheco Pass HST alternative.

In addition, should the Altamont Pass alternative serve San Francisco, a new San Francisco Bay crossing would be required, with



associated impacts on the San Francisco Bay and to the Don Edwards Wildlife Refuge. By comparison, for the Pacheco Pass alternative, the HST system can share tracks and right-of-way along the Caltrain Corridor and can be placed immediately adjacent to Henry Miller Road in the Central Valley.

Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative and Standard Response 4 regarding growth inducement.

The Pacheco Pass alternative would not induce additional “sprawl” development in Santa Clara, Merced, or San Benito Counties because the HST system would not provide substantially faster door-to-door travel times than auto travel between these counties and employment centers in the Bay Area. Please see Response to Comment F005-4 for further explanation. Please also see Standard Response 4 (subsection “HST’s Influence on Station Areas and Local Jurisdiction’s Growth”) for information on the Authority’s interests and efforts in influencing station-area development patterns and limiting sprawl development.

#### **O006-5**

See Response to Comment O007-46.

The base operating plan for the Altamont Pass alternative, which includes a service split in the East Bay, is reasonable. The operational planning assumptions used as inputs for the ridership and revenue forecasts were based on well-established HST operational practices.

As acknowledged in the Program EIR/EIS, some HST systems physically separate trainsets (“splitting and joining trains”) at some point on the route. However, the percentage of HST trains actually using this practice worldwide is very small. In France, about 10% of the TGV trainsets are physically split, whereas in Japan the percentage is even smaller. HST trainsets generally are not split during peak hours or at peak traffic points. For example, the TGV trainsets that split in southwest France have already served the major Paris-Bordeaux market and do not add time to the passengers

on this critical city-pair. The Paris-Bordeaux passengers in the other direction also do not lose time waiting for the trains to be combined into one because they board after consolidation. The mini-Shinkansen that splits to Yamagata does so after the major stations at Fukushima and Sendai. The Thalys HST does not split until after Brussels passengers get off. The HST splits are generally done in places where the traffic demands are low—not on the main trunk line between the major markets.

The HST ridership and revenue forecasts done 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 is not a major factor in differentiating between the Altamont and Pacheco Pass alternatives.

#### **O006-6**

Comment acknowledged. Please see Standard Response 4 regarding growth. The Authority does not agree with your assessment.

The Authority and FRA respectfully disagree with the assertions that the growth-inducement analysis is not credible and that highway congestion “will prevent any kind of substantial expansion of commuting into the Bay Area.” The 2030 employment and population projections shown in Tables 5.3-1, 5.3-2, and 5.3-5 for the No Project Alternative in the Program EIR/EIS illustrate that Central Valley counties will experience higher population growth rates than employment growth rates, as well as higher population growth rates than Bay Area counties. Both results, which are based on official forecasts from the Department of Finance and regional planning agencies, strongly support a conclusion that commuting from the Central Valley into the Bay Area will continue into the future in the absence of HST.

It is true that people are willing to commute long distances via car and that population and employment forecasts show people continuing to expand their commute and to populate the Central



Valley. However, neither the employment nor population trends would be substantially affected by the introduction of HST because HST does not provide faster door-to-door travel times than auto in most short to medium distance travel markets between the Central Valley and Bay Area.

Furthermore, part of this time/cost factor for potential commuting via HST involves travel between the HST station and the actual employment location. The HST system will have a very limited number of stations in the Bay Area, requiring that users transfer to another transit mode or private shuttle to access a destination that is beyond walking distance from an HST station. For many Bay Area commute trips, a local transit option is not available. An analysis prepared for the Interstate 580 (I-580) BART to Livermore Study<sup>1</sup> showed that only 30% of job destinations for Central Valley to Bay Area commuters would be accessible via BART and local transit (with only 4% within walking distance of a BART station). Lacking access to a transit egress mode, many prospective commuters on HST would need to drive or take taxi to their final destination, adding to the cost associated with the trip.

Even assuming transit is available, the cost of the HST would be significantly greater than the cost of driving for short- to medium-distance trips, making it unlikely to be preferred by commuters. For example the full cost of taking HST from Merced to Mountain View (HST fare, access, egress and station parking) is more than \$40 one way, as compared to about \$25 one-way for an automobile trip. HST would provide neither a time nor cost advantage compared to auto travel for commute trips between the Central Valley and Bay Area. Given that the HST connection between the Central Valley and Bay Area would be designed to serve primarily intercity travel, rather than regional commuters, it is quite logical that population, employment, and commute travel patterns would not substantially change with the introduction of HST.

#### **0006-7**

Please see Standard Response 4 regarding growth and Chapter 5 (Economic Growth and Impacts). Please also see Chapter 6 (Station Area Development), which includes the Authority's adopted policies requiring transit-oriented development (TOD) at HST stations and station area plans in the Central Valley.

The "tremendous increase in population and jobs" noted by the commenter are a feature of the No Project Alternative and also serve as the foundation of the HST alternatives. This increase is not due to the HST alternatives, and therefore does not require mitigation.

Results presented in Section 5 of the Program EIR/EIS do not identify any significant impacts from the indirect effects of growth inducement at the program level of analysis. Therefore, it is not necessary to analyze or adopt specific mitigation strategies for indirect effects of growth inducement in the Final Program EIR/EIS.

Please also see Standard Response 4 (subsection "HST's Influence on Station Areas and Local Jurisdiction's Growth") for further information on the Authority's efforts in influencing station area development patterns. Furthermore, the Authority has identified downtown areas within the Central Valley as the preferred locations for HST stations (see Chapter 6 and Chapter 8, Section 8.6.4 of this Final Program EIR/EIS and Chapter 6A of the California High-Speed Train Final Program EIR/EIS, 2005), which is consistent with the overall desire to avoid or minimize impacts.

The additional mitigation measures suggested by the comment for evaluation by the Authority are outside the scope of this Program EIR/EIS and beyond the purview of the Authority and FRA to accomplish (e.g., redirecting state highway funding, seeking redirection of transportation funds approved by ballot initiation, preparing local land use plans, seeking local development fees, and raising the state gas tax).

<sup>1</sup> I-580 Bart to Livermore Study – Final Report; Cambridge Systematics, Inc.; July 2002; pages 6–8.



**0006-8**

Please see Responses to Comments Letter O007. The Authority and FRA are pursuing a transportation solution that would truly benefit the people of the State of California. The Authority and FRA appreciate the comments provided by TRANSDEF on the Draft Program EIR/EIS.



**Comment Letter O007 (Stuart M. Flashman, October 25, 2007)**

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O 007

10-25-07

Chairman Kopp and  
 Members of the High Speed Rail Authority  
 925 L Street, Suite 1425  
 Sacramento, CA 95814  
 Attn: California High-Speed Train  
 Draft Bay Area to Central Valley Program EIR/EIS Comments

Re: Comments on Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/S) for the Proposed Bay Area to Central Valley High-Speed Train Program

Dear Chairman Kopp and Members of the Authority:

These comments are submitted on behalf of the following groups:

- BayRail Alliance
- California Rail Foundation (“CRF”)
- California State Parks Foundation (“CSPF”)
- Defenders of Wildlife
- Grasslands Water District
- Planning & Conservation League (“PCL”)
- Regional Alliance for Transit (“RAFT”)
- Sierra Club
- Train Riders Association of California (“TRAC”)
- Transportation Solutions Defense and Education Fund (“TRANSDEF”)

The purpose of this letter is to provide comments on the Draft Program Environmental Impact Report/Draft Environmental Impact Statement (“DPEIR/S”) for the proposed Bay Area to Central Valley High-Speed Train program (hereinafter “Project”) and to inform the Authority that the document fails to comply with the requirements of the California Environmental Quality Act (“CEQA”), Public Resources Code Section 21000 et seq. and the CEQA Guidelines, California Code of Regulations, title 14, section 15000 et seq. (“CEQA Guidelines” or “Guidelines”) and the National Environmental Policy Act (“NEPA”) 42 U.S.C 4321; 40 C.F.R. 1500.1. The commenting groups are environmental and transportation advocacy organizations concerned about the choices made in building high-speed rail in California. Many of the groups submitting this comment letter also submitted significant comments on the prior programmatic EIR/S for HST Statewide.<sup>1</sup>

<sup>1</sup> There were also letters submitted commenting on the Final Statewide EIR/S, e.g., letter from CSPF dated 10/31/05.

(See, Letter from Stuart Flashman (TRAC/CRF) dated 8/31/2004; Letter from David Schonbrunn (TRANSDEF) dated 8/31/2004; Letter from Michael Kiesling (RAFT) dated 8/28/2004; Letter from Kim Delfino (Defenders of Wildlife) dated 8/30/2004 and in letter with other conservation groups (Comment Letter O049 dated 8/31/04); Letter from Fred Keeley (PCL and other associated groups) dated August 31, 2004; Letter from Margaret Okuzumi (BayRail Alliance) dated 8/31/2004; Letter of Kenneth Ryan (Sierra Club) dated 8/22/2004; and Letters of Thomas Enslow (Grasslands Water District) dated 8/31/2004, all of which letters and associated exhibits and attachments are already present in CHSRA files and are incorporated herein by this reference.) Major concerns were raised at that time concerning the importance of fully analyzing and retaining Altamont as an alignment choice, and concerns were expressed about some of the assumptions made in the choice of alternatives and methods of analysis used. All these concerns remain unaddressed in the present DPEIR/S.

The Bay Area to Central Valley DPEIR/S was published, partly in response to the many objections that had been raised to the Statewide HST EIR/EIS, for the purpose of analyzing northern route choices from the Central Valley to major cities of the Bay Area. The main choices analyzed in the DPEIR/S are Pacheco Pass (near Highway 152) and an alignment through the Altamont Pass (near Highway 580). While we appreciate the effort to provide the analysis requested, it appears that the haste to get this document out for public comments has resulted in omitting information that is critical to the DPEIR/S’s adequacy as well as information necessary to support informed decision-making by the Board. In addition, the current DPEIR/S, despite the many comments received on the prior EIR/EIS, appears to have repeated some of the same methodological mistakes that were present in the Statewide HST EIR/EIS. As a result, the DPEIR/S fails to include a complete, accurate and objective analysis of regional rail ridership for the Sacramento-Stockton-Pleasanton-San Francisco/San Jose Corridor and for the Merced-Tracy-Pleasanton-San Francisco/San Jose Corridor. The document’s failure to provide this information renders its analysis of the effects of the Program Alternatives on the environment, as well as the social and economic impacts of the Alternatives, (and resulting secondary physical environmental impacts) inadequate. Under NEPA and CEQA Guidelines, the omission of this information from the DPEIR/S circulated for public review and comment is a fatal deficiency. In addition, the DPEIR/S contains numerous erroneous assumptions that skew the resulting analysis. For these reasons, as well as many others to be described below, the DPEIR/S is fatally inadequate and must be revised and re-circulated before it can be relied upon to support CAHSRA and other agency decisions, particularly on matters as important as a HSR Bay Area access alignment.

A summary of the major defects and omissions in the DPEIR/S includes, but is not limited to, the following:

- The DPEIR/S fails to adequately and completely describe the HST project alignment, station and network alternatives.
- The DPEIR/S lacks an adequate summary section.

O007-3

O007-4

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**Comment Letter 0007 - Continued**

<ul style="list-style-type: none"> <li>○ The DPEIR/S fails to analyze impacts and improperly defers analysis until the project-level EIR/S.</li> </ul>	0007-7
<ul style="list-style-type: none"> <li>○ The DPEIR/S uses operational assumptions inconsistent with projected future statewide demand to compare the performance of Altamont and Pacheco corridor alternatives.</li> </ul>	0007-8
<ul style="list-style-type: none"> <li>○ The limited analysis of alignment alternatives included in the DPEIR/S is based on flawed assumptions and incomplete analysis concerning regional rail ridership for trips within the Sacramento – San Joaquin Valley – San Francisco Bay Area.</li> </ul>	0007-9
<ul style="list-style-type: none"> <li>○ The DPEIR/S includes flawed descriptions of project components and operational constraints that artificially narrow the range of alternatives open to consideration.</li> </ul>	0007-10
<ul style="list-style-type: none"> <li>○ The DPEIR/S fails to adequately identify and describe the significance of the project-related and cumulative impacts of the various Program Alternatives before and after mitigation. Conclusions regarding these impacts in the DPEIR/S are in many cases based on inadequate and misleading information (e.g. growth inducement, impacts to agricultural land, biological resources, etc.). The Summary Table compares the impacts of HST only to the No Project Alternative.</li> </ul>	0007-11
<ul style="list-style-type: none"> <li>○ To determine level of impact, the HST Project Alternatives are improperly compared with the No Project Alternative instead of baseline conditions for many environmental topic areas including, but not limited to: traffic, transit, circulation, air quality and biological resources.</li> </ul>	0007-12
<ul style="list-style-type: none"> <li>○ Mitigation “strategies” consist of vague and unenforceable suggestions and for the most part are improperly deferred until the project-level review. Some of the suggested strategies would create new impacts that have not been identified or evaluated (e.g., intersection and roadway improvements to serve HST stations, which would themselves potentially create traffic and safety impacts; elevation of railway structures to maintain wildlife corridors, which may exacerbate noise and vibration impacts; erection of soundwalls, berms, and other noise abatement structures, which may have visual and hydrologic impacts; etc.)</li> </ul>	0007-13
<ul style="list-style-type: none"> <li>○ The DPEIR/S fails to identify the environmentally superior HST alignments and station locations.</li> </ul>	0007-14
<ul style="list-style-type: none"> <li>○ The DPEIR/S fails to accurately describe the growth-inducing potential of the Pacheco alignment.</li> </ul>	0007-15
<ul style="list-style-type: none"> <li>○ The DPEIR/S postpones identification of the environmentally superior alternative.</li> </ul>	0007-16
<p>With respect to both of CEQA’s basic purposes – informing the public and decision makers of the environmental consequences of their actions before they are made and avoiding or reducing environmental damage to the extent feasible – this DPEIR/S fails. Because of the many flaws in the DPEIR/S, it is not surprising that such conclusions as it reaches are equally flawed.</p>	0007-17

Consideration of accurate information on project impacts related to the various project choices presented in the DPEIR/S, in combination with basic logic, would force the selection of the Altamont alignment as the environmentally-, financially-, and logistically-superior alignment.

- The Altamont alignment results in a more highly integrated and efficient High Speed Rail system and would serve a significantly larger market than does the Pacheco alignment. Even the DPEIR/S’s inadequate analysis of travel times shows that the Altamont alignment gives roughly equivalent travel times between Northern and Southern California as Pacheco, but a far superior travel time between the Bay Area and the northern San Joaquin Valley. For example, travel time between Sacramento and San Francisco via Pacheco is 1 hour and 47 minutes, while via Altamont it is 1 hour and 6 minutes.
- The Altamont alignment will better serve the Bay Area’s urban population centers and expected growth (see DPEIR/S at Figure 1.2-6). Once south of San Jose, the Pacheco alignment travels primarily through rural agricultural areas and wetlands, while the Altamont alignment would provide convenient access to three major Tri-Valley population centers, Dublin, Pleasanton, and Livermore2, as well as Sacramento, Stockton, Tracy, Modesto, Merced and many other nearby communities. If it were not for the flaws permeating the ridership analysis contained in the DPEIR/S, the ridership figures would have shown the clear superiority of the Altamont alignment.
- While both alignments may appear, according to the DPEIR/S’ analysis, roughly similar in meeting the Project purpose of linking San Francisco and Los Angeles by a high speed train line, the Altamont alignment far better fulfills a major element of the HST Purpose and Need: “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.” (DPEIR/S at 1-4.) Levels of congestion on Highways I-80 I-580, I-680, and I-238 and SR92 are very high and represent a major constraint on the Bay Area’s overall transportation system, far outstripping the levels of problematic traffic conditions in southern Santa Clara County.3 The Altamont alignment could provide major relief for these corridors by allowing fast convenient access between the Bay Area and Sacramento and other Central and Northern San Joaquin Valley destinations. The Pacheco alignment provides no comparable benefit.
- While both alignments would involve crossing wetlands areas, the Altamont alignment could, in the short term, use the already-planned Dumbarton Rail

<sup>2</sup> Tri-Valley stations would also be easily accessible from San Ramon, Danville, and Castro Valley.  
<sup>3</sup> In June, 2007, Caltrans released its rankings of the Top Ten Congested Bay Area Freeways for 2006. Number one (at 12,230 weekday vehicle hours of delay) was Interstate 80 westbound during morning commute hours; #2 and #3 (at 6,720 and 5,320 hours of delay, respectively) was Interstate 580 in Eastern Alameda County during morning and evening commute hours; #6 was Route 92 eastbound during the evening commute; #8 (at 2,760 weekday vehicle hours of delay) was Interstate 80 westbound during the evening commute. None of the top ten was located in the south bay or on the peninsula south of San Francisco. The same was also true in 2005. See [http://www.mtc.ca.gov/news/press\\_releases/rel407.htm](http://www.mtc.ca.gov/news/press_releases/rel407.htm)



**Comment Letter 0007 - Continued**

Bridge/Dumbarton Rail Project alignment with minimal additional project capital costs, thereby reducing net impact on wetlands and, through project-associated bridge improvements such as installing raised railbeds and wildlife undercrossings and removing existing impediments to tidal flows and Bay currents, actually improve existing wildlife habitat. By contrast, not only would the Pacheco alignment not offer this potential for beneficial impacts, it would sever the connectivity of a large wildlife area and impact thousands of acres of extremely important wetland and wildlife habitat, including the Grasslands Ecological Area of Merced County, California which has been designated a Wetlands of International Importance under The Convention on Wetlands of International Importance. Secondary impacts from growth induced by the Pacheco alignment would cause yet further damage to this important wetlands resource; damage that cannot be mitigated, given the unique importance of the wetlands involved.

Alternatively, and certainly in the long term, the current Dumbarton Rail Bridge could be replaced by a tunnel or high bridge, either of which would further decrease the Project's long-term wetlands impacts. While a tunnel could potentially fully avoid wetlands impacts for either Altamont or Pacheco alignment, such a tunnel option would involve much shorter distances and less challenging terrain in the Altamont than the Pacheco alignment.

Given the multiple inadequacies described in this letter, this DPEIR/S, even with the addition of accurate information, cannot properly form the basis of a final PEIR/S. CEQA and the CEQA Guidelines require recirculation of a draft EIR where, as here, the document is so fundamentally inadequate in nature that meaningful public review and comment are precluded. See CEQA Guidelines § 15088.5. We have prepared the detailed comments below with the assistance of technical experts, including Mike White, Conservation Biology Institute, and Terrell Watt, Terrell Watt Planning Consultants. Resumes of these experts are attached hereto as Exhibit A.

**I. THE DPEIR/S DOES NOT COMPLY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND THE NATIONAL ENVIRONMENTAL POLICY ACT**

**A. Use of a Program DPEIR/S Does Not Excuse Inadequate Analysis**

As discussed more fully below under the individual impacts, the DPEIR/S repeatedly fails to adequately describe the project, analyze project impacts, and mitigate its host of associated impacts with specific, enforceable mitigation measures. As apparent justification for the DPEIR/S's repeated deferral of adequate analysis of project impacts and mitigation measures, the DPEIR/S points to the fact that it is a programmatic document. However, the mere fact that the DPEIR/S is programmatic is not a carte

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blanche to omit analysis and discussion of the project that is currently feasible.<sup>4</sup> An agency "must use its best efforts to find out and disclose all that it reasonably can." CEQA Guidelines § 15144. Where an EIR is a program EIR, it must be sufficiently detailed to provide a full analysis of the potential environmental impacts of any discretionary decisions that would be made in reliance on the EIR, but may defer to a later study full analysis of the potential environmental impacts of actions or decisions that would not be taken until after further environmental study. 14 Cal Code Regs section 1512(b); Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal.App. 4<sup>th</sup> 182. In this case, the DPEIR/S states that its intended use is to choose a preferred alignment between the Bay Area and the Central Valley.

"The Program EIR/EIS will enable the Authority and FRA to evaluate the potential impacts of proposed HST system alignment and station locations in the Bay Area to Central Valley corridor, select preferred alignments and station locations, and define general mitigation strategies to address any potentially significant adverse impacts." DPEIR/S at 1-2.

"After considering public and agency comment, the Authority and FRA will identify preferred alignment alternatives, station location options, and a preferred network alternative." DPEIR/S at S-17.

In order to make such choices, the DPEIR/S must first fully analyze, to the extent currently feasible, all the potential impacts that may arise if a particular alignment is chosen and it must identify feasible and enforceable mitigation measures to address these impacts. Here, the DPEIR/S's failure to describe and analyze the project extends well beyond the exact location alignments and stations. The DPEIR/S's vague and noncommittal analysis of numerous project elements, as well as its flawed description of potential project components, including regional rail opportunities, operational constraints, environmental impacts, cumulative impacts and mitigation measures, precludes both proper analysis of project alternatives and an informed choice of a Bay Area access alignment.

Another significant flaw of the DPEIR/S is that, in violation of CEQA guidelines that prohibit deferring analysis under the guise of "tiering", it repeatedly claims that project impacts would not be significant, based solely on unsupported assumptions about future conditions. In contrast to the approach taken in the DPEIR/S, CEQA Guidelines encourage consideration of environmental consequences at the "earliest possible stage, even though more detailed environmental review may be necessary later." McQueen v. Board of Directors, 202 Cal.App.3d 1136, 1147 (1988). Similarly, NEPA requires agencies to integrate the NEPA process into their activities at the earliest possible time. 40 C.F.R. 1501.1; 1501.2. Regardless of an intention to undertake site-specific environmental review for future project phases, the use of "tiering" in a program EIR/S is

<sup>4</sup> The prior statewide PEIR/S likewise deferred discussion of numerous impacts to *this* PEIR/S. The buck has to stop somewhere! This PEIR/S will serve as the basis for a critical choice of alignment. That choice cannot properly be made until a full analysis of all pertinent impacts has been properly completed in this PEIR/S.

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**Comment Letter 0007 - Continued**

not an acceptable device for deferring the identification of significant environmental impacts. Stanislaus Nat'l Heritage Project v. County of Stanislaus, 48 Cal.App.4th 182, 199 (1996), especially where, as here, consideration of those impacts is necessary to make informed choices at the programmatic level.

The DPEIR/S attempts to present a choice between two preferred alignments and their associated general station locations:

“After considering public and agency comment, the Authority and FRA will identify preferred alignment alternatives, station location options, and a preferred network alternative.” DPEIR/S at S-17.

Accordingly, the DPEIR/S must include a sufficient level of detail on each feasible alignment alternative and its related impacts and mitigation to allow the HSRA to make an informed alignment choice. In the absence of sufficient information to make precise impact predictions, the PEIR/S must consider a “worst-case scenario” of impacts for each of the alignment option, including the related level of development and associated impacts, as well as specific information about each alternative to the extent it can be forecast and analyzed. By failing to provide sufficient detail about project elements and about their environmental impacts, the DPEIR/S fails to provide an adequate basis for an informed choice of HST Bay Area access alignment. The DPEIR/S’s deferral of more detailed project description elements such as station locations and characteristics and right of way and track characteristics, analysis of impacts *and* mitigation measures is particularly egregious here because project approvals include alignment and station locations and commit the Authority to a course of action. See Rio Vista Farm Bureau v. County of Solano, 5 Cal.App.4th at 351, 371 (1992). One specific criticism is that the maps provided in the DPEIR/S lack sufficient detail to allow even people familiar with the geographic areas in question to readily determine whether or not state and federal parks and/or lands, or other parcels targeted for conservation or designated as buffer zones, would be significantly affected (or even traversed) by the various proposed alignment alternatives. One particularly significant DPEIR/S omission is the total absence of a description of the regional rail benefits that could be integrated with a Altamont HST alignment but not with a Pacheco HST alignment (i.e., the ability of the Altamont alignment option to be integrated with a regional rail system, under the auspices of Caltrain or other regional authority, serving the Bay Area and Northern San Joaquin Valley).

As part of its flawed approach, the DPEIR/S impermissibly and repeatedly concludes that the majority of all of the HST project’s environmental impacts are either less than significant or will be rendered less than significant by mitigation, while at the same time deferring the necessary analysis of impacts as well as mitigation measures. Under CEQA, an EIR may conclude that impacts are insignificant only if it provides an adequate analysis of the magnitude of the impacts and the degree to which they will be mitigated. See Sundstrom, 202 Cal.App.3d at 306-07. A conclusion about the significance of an impact or the feasibility of a mitigation measure must be based on substantial evidence, not mere speculation about the possible results of future study.

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Thus, if an agency fails to investigate a potential impact, its finding of insignificance simply will not stand. Id. Further, CEQA generally requires that all mitigation measures be adopted simultaneously with, or prior to, project approval. Here the proposed mitigation measures are not measures at all. Rather, they consist of vague strategy suggestions, the details of which are deferred until project-level review. An agency may defer preparation of a plan for mitigation only when the potential mitigation measures are clearly feasible and capable of mitigating impact to a level of insignificance, or alternatively when the agency commits itself and/or the project proponent to satisfying specified performance standards that will ensure the avoidance of any significant effects. In the present case, the DPEIR/S violates CEQA by deferring critical analyses of project impacts and feasible mitigation while at the same time assuming either that the impact will be insignificant or that it can be fully mitigated.

The following is a non-exhaustive list of examples of mitigation strategies that are vague, unenforceable and details of which are deferred to a later date:

Transportation (see pages 3.1-38 to 40)

- Major intersection improvements.
- Provide additional parking.
- Widen roadways.
- Designate one-way street patterns.

Air Quality (see page 3.3-20 to 21)

- Increase use of alternative-fueled vehicles
- Increasing parking for alternative transportation modes
- Construction mitigation to be determined after more detailed project plans are available.

Specific mitigation measures, including identified funding for them sufficient to demonstrate their feasibility, must be developed at this time, well before project-level environmental review, and based on complete project information and impact analyses. Identifying specific, enforceable, and feasible mitigation now is also important because some potential mitigation measures may, in themselves, create significant secondary environmental impacts (e.g., measures such as roadway widening, intersection signalization, construction of soundwalls, etc.). Such secondary impacts must also be considered, analyzed and, if possible mitigated. However, this cannot be done properly if full consideration of such measures is put off to a later time. Project-related and cumulative impacts determined to be significant and unavoidable must also be identified and listed as such. These include, but are not limited to the following<sup>5</sup>:

<sup>5</sup> The DPEIR/S is so poorly drafted that it is difficult to determine what impacts are significant before and after mitigation. The individual topic chapters fail to clearly identify significant impacts and demonstrate how mitigation reduces significant impacts to less than significant. The closest the DPEIR/S comes to identifying this *required information* is Table 9.3-1, which falls well short of CEQA/NEPA requirements for identification of significant impacts before and after mitigation. Instead, it only identifies the impacts as

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- o Traffic and circulation
- o Land use compatibility
- o Hydrology
- o Noise
- o Biological impacts related to changes in hydrology and noise
- o Biological impacts related to habitat fragmentation and wildlife corridors
- o Growth inducement

The DPEIR/S's failure to adequately identify and analyze the potentially significant effects of the project, and to design proper mitigation measures prior to project approval, renders the document legally inadequate, particularly as it applies to choosing between potential high-speed rail alignments. With the DPEIR/S in its current form, decision-makers, the public and permitting agencies cannot evaluate the advisability of project approval even at the level of basic alignment and station choice. A revised DPEIR/S that provides adequate information about project alternatives, project-related, secondary, and cumulative impacts and mitigation measures must be completed and circulated before decisions are made concerning the HST project, and specifically a choice of project alignment.

**B. The DPEIR/S Lacks an Adequate Summary Section**

This project is one of the largest infrastructure projects ever contemplated in California history and therefore one of the most complex projects ever considered. As such, it is critical that the document relied on to inform decision-making concerning the proposed project be well organized, clear and readable. Environmental documents are designed for many different readers and different sections are at times directed to different audiences. That makes it very important for the summary section to present information to readers interested in a getting a quick understanding of the proposed action and its consequences. Typically, EIR and EIS summary sections include a matrix or table that allows comparison of all alternatives in terms of their respective environmental impacts and includes conclusions regarding the significance of impacts before and after mitigation. Great care should be taken to ensure that after reviewing the summary section, readers have a clear understanding of the proposed project, project alternatives and how they compare to one another. This DPEIR/S fails to provide a clear, complete and therefore adequate summary section. Moreover, it is virtually impossible to determine the HST alignment choices given the excessive number of sub-alignment and network choices, many of which are given obscure names that only further obfuscate the presentation of choices to the document's readers. Moreover the environmental impacts of the various alignments and sub-alignments are not clearly described and delineated. The PEIR/S needs to be revised to include clear, complete, and accurate descriptions of the various alignment choices under consideration, including maps showing sufficient detail to indicate the relationship of the various alignment options to significant geographic

"potential". Table 7.2-20 also does not provide the required information pursuant to CEQA and NEPA and instead characterizes impacts as high, medium or low.

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features, cities, and regional areas of concern, including specifically public parklands and other areas subject to Sections 4(f) and 6(f).

The alternatives section describes HST Network Alternatives, which represent different ways to combine HST Alignment Alternatives and station location options as well as the HST Alignment Alternatives themselves. According to the DPEIR/S:

"Although HST Alignment Alternatives and station location options were screened and evaluated to identify those that are likely to be reasonable and practicable and to meet the project's purpose and need, the representative network alternatives have not yet been so evaluated. 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 and how each would perform as a HST network (e.g. travel times between various stations, anticipated ridership, operating and maintenance costs, energy consumption, and auto trip diversions). The different system characteristics, as well as environmental factors of the network alternatives, present complex choices that will be better supported and informed following public review and comment on this document." DPEIR/S at 2-22.

Essentially, the document appears to be saying that the information is too complicated to make any sense until after the environmental review has become final. If the information provided in the DPEIR/S is incomplete, the document should specifically identify the gaps in the information and discuss how informed decisions can be reached without that information. If reaching a decision is not possible without the information, the document should be withdrawn and not republished until the missing information can be provided. It is inappropriate to circulate an environmental document for public review and comment with the knowledge and expectation that the version being circulated is not yet complete.

The comparison table (Table 7.3-2) fails to clearly characterize as significant or insignificant the impacts of each alternative. Moreover, the body of the DPEIR/S does not include clear information about the level of significance of project-related impacts. Only Table 9.3-1 indicates the potential significance of HST-related impacts before and after mitigation, but only for the HST network as a whole. No such information is provided comparing the Pacheco and Altamont alternatives. After all, one of the major purposes of the PEIR/S is to provide the information required to make an informed choice between the two alignment alternatives. Without a clear and complete set of underlying facts, making an informed choice, as CEQA requires, is impossible. This is a major flaw in the DPEIR/S, which must be corrected in a recirculated draft.

Once again, this DPEIR/S is being relied on to select Bay Area – Central Valley HST alignments and station locations. If the document is to be used for this choice, a revised summary table or matrix must be developed that clearly characterizes the significance of impacts before and after mitigation and presents the information in a manner that allows

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meaningful comparison of both the modal alternatives and project components (alignments/station locations, etc.).

Further complicating the utility of the DPEIR/S for informed decision-making, the document refers to a massive list of related programs and studies including, but not limited to the following:

- o San Francisco Bay Area Regional Rail Plan (at 2-14)
- o Capitol Corridor Rail Service (at 2-16)
- o Caltrain Corridor Commuter Rail Service (at 2-16)
- o Altamont Commuter Express Service (page 2-17)
- o Dumbarton Rail Project (2-17)

These related reports are not adequately summarized in the DPEIR/S and in some cases, present very different alternatives from those analyzed in the DPEIR/S for the Bay Area to Central Valley alignments and stations (e.g. the alternatives analyzed for Altamont in the SF Bay Area Regional Rail Plan are not consistent with those analyzed in the instant DPEIR/S). This approach is both confusing and misleading. A revised DPEIR/S must provide a summary that:

- o Clearly describes all alternative alignment, stations and network choices, in sufficient detail to allow for informed decision-making;
- o Clearly and comprehensively characterizes the environmental, operational and other impacts of all alignment and stations alternatives and choices before and after mitigation;
- o Clearly describes and summarizes relevant information in all related reports and attachments relied upon by the DPEIR/S.

**C. The Project, as Defined in the DPEIR/S Fails to Adequately Achieve the Purpose and Need.**

While the statement of purpose and need admirably notes the need for both statewide and regional transit improvement, the Project, as proposed in the DPEIR/S fails to meet that purpose and need.

As both this DPEIR/S and the prior Statewide Programmatic EIR/S make clear, the purpose of the statewide HST system project is to enhance statewide passenger mobility within California and remove or reduce constraints on passenger transportation present within California's existing transportation infrastructure. (See, FPEIR/S for Proposed California HST System at 1.2.1.) In particular, the statewide HST system intends to facilitate rapid passenger transportation between California's major population, governmental, and business centers, notably San Diego, Los Angeles, San Jose, Oakland,

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San Francisco, and Sacramento. (See Statewide HST FPEIR/S, Fig. 1.2-2 and legend.) In addition, however, the system is also intended to help reduce congestion due to regional and subregional trips, which interfere with overall mobility. (Statewide FPEIR/S at 1-7.)

Because the statewide HST system would link California's major cities and population centers, it could provide both statewide and regional/subregional service. For example, although the system centers on providing service between San Francisco and Los Angeles, it could also provide regional and subregional service between the various cities included in the Northern tier of the statewide HST system. This would help meet the Project's purpose of alleviating congestion caused by regional and subregional trips, particularly automotive trips.

This DPEIR/S, which is intended to tier off of the prior DPEIR/S, presumably also intends to meet the same purposes and needs as the statewide project. It also would meet the more specific purpose of providing access between the statewide HST system and cities in the San Francisco Bay Area. The DPEIR/S states its purpose 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.” (DPEIR/S at 1-4.)

This statement acknowledges that a major project purpose is to “relieve capacity constraints of the existing transportation system,” but the project described and analyzed in the DPEIR/S fails to acknowledge that this can involve reducing regional and subregional automotive trips that currently congest the Bay Area's highway system. While the DPEIR/S acknowledges a regional need for transportation improvement (DPEIR/S at 1-14 to 1-15), it fails to acknowledge that the HST system can also assist in addressing that regional and subregional need.

As a consequence of these deficiencies, the DPEIR/S fails to consider the ways in which the proposed Bay Area to Central Valley component of the state HST system can function synergistically with other existing, proposed, and potential rail systems to promote regional and subregional mobility and reduce regional and subregional auto-dependency.

In particular, the DPEIR/S fails to adequately discuss how the construction of HST right-of-way and facilities as part of the Bay Area to Central Valley HST Project could promote use of the HST system for regional and subregional trips, and perhaps even more importantly, how it might facilitate the improvement of the existing regional and

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subregional passenger rail system and actually promote the institution of new and improved subregional passenger rail service. Such synergistic effects are part of the very purpose of the HST system, both statewide and in the region covered by this Project. The DPEIR/S must therefore be revised to consider this important component and how it will be affected by the alignment choices inherent in this Project.

**D. The DPEIR/S Fails to Adequately and Accurately Describe the Proposed Project**

The DPEIR/S’s incomplete and inaccurate project description omits critical details of the project, including, but not limited to significant construction activities, engineering and operations aspects of the project, including energy sources. As a result of the DPEIR/S’s failure to discuss key project components, potentially significant environmental impacts are not adequately described, analyzed or addressed.

Under both CEQA and NEPA, the DPEIR/S must contain a clear and comprehensive project description. The CEQA Guidelines define “project” as “the whole of an action, which has a potential for resulting in a physical change in the environment, directly or ultimately...” CEQA Guidelines Section 15378. Among other components, an EIR’s project description must contain a “general description of the project’s technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.” CEQA Guidelines Section 15124(c). Similarly NEPA provides that the lead agency must ensure that the description of the project action includes “connected actions” that are currently proposed or will be proposed in the foreseeable future. The lead agency must determine the proposed action’s full extent, including all components, segments, and future phases. An agency may not divide a proposed action into smaller segments to avoid disclosure and analysis of the full environmental effects. If the EIS excludes arguably related actions, it must include the following:

- o A description of the related actions and how they relate to the proposed action;
- o A brief discussion of the impacts of the related actions to the extent they are known;
- o An explanation of why it is not required or possible to evaluate the actions in detail at this time; and
- o An explanation of when, and in what type of NEPA document, the related actions are being or will be evaluated (e.g. a second Tier EIS).

**1. The DPEIR/S’s Description of the Project is Not Adequate**

Under both CEQA and NEPA, the DPEIR/S must contain a clear and comprehensive project description. Because this DPEIR/S will be relied on for Bay Area alignments and station locations for HST, the project description must accurately, completely and clearly describe all of the following:

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- Key features of each proposed alignment, station location and other features of HST in sufficient detail to allow comparison of environmental impacts, and other considerations at a programmatic level (e.g. construction, operations, related facilities, elevated or not and why; etc.); and
- Projected total ridership, including local and regional ridership data for the alternative alignments. This information is critical to determining the financial viability of the alternatives and what amount of capital expense could reasonably be justified based in the projected ridership.<sup>6</sup>
- Source of and methodology used to obtain projected riderships
- Portion of the projected local and regional ridership ascribed to each of the HSR alignment options that would occur anyway, even if there were no HSR.
- Total cost, over and above the costs of developing the high speed rail service itself, of developing said local and regional riderships and likely source(s) of the extra funding needed to develop said riderships.

Instead of providing a clear and comprehensive project description early in the DPEIR/S, the reader must “assemble” the project descriptions for each alternative choice by sifting through not only the DPEIR/S, but all of its appendices, illustrations and in some cases, related studies. Furthermore, the descriptions and presentation of the alternatives such as listed in DPEIR/S Table 2.5-1 (for example, “San Francisco and San Jose Termini” or “Oakland and San Jose Termini”) do not correspond to the list of accompanying figures in DPEIR/S chapter 2.5, and the presentation of content within those figures is inconsistent with the description of alternatives. This approach contravenes both CEQA and NEPA. All information necessary to accurately and thoroughly describe the proposed project or action – and in this case, actions – should be presented in the DPEIR/S in a readily comprehensible form. A revised DPEIR/S must be completed which includes all information about the proposed modal alternatives necessary to support informed decision-making.

In addition, the project description fails to allow the identification of a single environmentally superior alternative, as required under CEQA; nor does it easily accommodate the requirement under §404 of the Clean Water Act to identify a Least Environmentally Damaging Practicable Alternative (“LEDPA”). While CEQA does not require that the lead agency choose the environmentally superior alternative, the Clean Water Act does require that, if an agency project requires deposition of fill material in waters of the United States, the LEDPA be chosen. Federal agencies will be relying on the PEIR/S in evaluating this project under the Clean Water Act. It is therefore essential

<sup>6</sup> According to the DPEIR/S, “Ridership forecasts for the Pacheco Pass (terminating in San Francisco) and the Altamont Pass (terminating in San Francisco and San Jose) have been used as the *representative demand* for defining intercity travel need for the HST Alignment Alternatives in this Program EIR/EIR.” DPEIR/S at 2-6. As is discussed further below, the ridership analysis conducted for the DPEIR/S is plagued by incorrect and improper operational assumptions. A new ridership study is needed. (See below.)

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that it accurately identify and justify the LEDPA to guide those agencies' decision making.

On way of addressing this deficiency would be for the PEIR/S to identify an environmentally superior alternative for both the Altamont and Pacheco alternatives, and then, comparing the two, identify the better of the two to be both the environmentally superior alternative and the LEDPA.

**2. In Comparing the Performance of the Altamont and Pacheco corridor alternatives, the DPEIR/S Makes Improper Ridership and Operational Assumptions.**

The DPEIR/S includes a number of inaccuracies about the various project alternatives. For example, on Page 2-17 to 2-18, the DPEIR/S described the Dumbarton Rail Corridor ("DRC") Project being undertaken by Caltrain and the Peninsula Joint Powers Board. According to the DPEIR/S, the refurbishment of the Dumbarton rail bridge being undertaken as part of this project, "conflicts with the proposed HST system and the JPB's Caltrain Corridor EMU option." However, the DPEIR/S fails to indicate in what precise respects the systems conflict.<sup>7</sup> While use of the DRC's refurbished bridge may not be optimal for high-speed rail, there is nothing basically incompatible between the bridge improvements currently proposed for the DRC and the requirements for high-speed rail use. In fact, at the statewide level, the High Speed Rail Authority plans to use part of the Southern California Metrolink system as part of the high-speed rail system. (See, e.g., CHSRA Statewide EIR/S, Section 6.4.2 [Sylmar to Los Angeles alignment options].) That system, like the DRC, would use a combination of diesel powered and electrified cars. While it is true that the current single-track bridge is less than ideal for joint use by the DRC and high-speed rail, appropriate scheduling would allow sufficient service for both systems, especially during the initial start-up phase of the high-speed rail system. Since the currently-planned DRC bridge is intended to allow speeds of up to 130 km/hour, trains would traverse the roughly seven kilometer distance across the span in less than four minutes. This would not significantly affect the overall travel time for the route. Replacement or improvement (e.g., to a full double-tracked high bridge, or a tunnel) could, if desired, occur at a later time, and without disrupting operations significantly.

Failing to acknowledge the feasibility of using the expected DRC improvements as part of the Altamont network distorts the DPEIR/S' analysis of the feasibility and operational characteristics of the Altamont alignment alternative.

<sup>7</sup> The DPEIR/S states that the DRC currently proposes to use a mixture of conventional diesel trains and EMUs that would be incompatible with HST. However, no final decision has been reached on this question. As the DPEIR/S acknowledges, Caltrain is strongly considering an upgrade to EMUs compatible with the HST system. Such an upgrade would be essential for Caltrain and HST to share track on the peninsula. There is no reason why the DRC would not also consider an analogous upgrade. Indeed, since the DRC would expect to integrate with Caltrain, there is every reason to expect the DRC to be implemented using compatible EMUs. Thus incompatible equipment is not a valid basis for rejecting use of the DRC bridge.

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In a similar vein, the DPEIR/S as well as a ridership study conducted in tandem, makes the unwarranted assumption that it is impractical to split or join train segments entering or leaving the Bay Area so that they can have different final destinations/origins (DPEIR/S at p. 4-20 and 7-12, fn.9).<sup>8</sup> This ignores the reality of current HST operations in other countries, such as France and Germany, where it is routine for different cars on the same train to be routed to different destinations. Contrary to the assertion of the DPEIR/S, this is neither non-aerodynamic, confusing to passengers, nor particularly time-consuming to accomplish.<sup>9</sup> The two component trains can be quickly uncoupled, each set with its own locomotives (or with the cars themselves being EMUs<sup>10</sup>). The coupling can be designed so that aerodynamic efficiency is maintained, and passengers are clearly directed by station signs as to which cars are destined for which direction.<sup>11</sup> This fallacious assertion distorts the project description for the Altamont alternatives and, in particular, fatally distorts the scheduling assumptions that underlie the ridership modeling used in the DPEIR/S.<sup>12</sup> As a result, the ridership analysis is fundamentally flawed and fails to provide an accurate comparison of the Altamont and Pacheco alternatives. The ridership analysis must be reconsidered taking into account the ability to split trains and the consequent ability to run trains that will access both San Jose and San Francisco, and conversely to join trains originating in San Jose and San Francisco prior to continuing on to the ultimate destination.<sup>13</sup>

The DPEIR/S then goes on to assume, based on its prior assumptions about train splitting, that service through Altamont to/from Los Angeles must be divided between San Jose trains and San Francisco trains, and thus there will be fewer trains going to/from each of these two terminals. (DPEIR/S, Chapter 4 and 5-12). As a consequence, the projected ridership and revenue from a representative Pacheco alternative appear roughly equivalent to those for the representative Altamont alternative. As already discussed, the assumption that the splitting and joining of HST sets is impractical is incorrect. In point of fact, the HST systems of both France and Germany, including the Thalys, TGV, and ICE HST networks, routinely split and join HST sets when there is insufficient demand to

<sup>8</sup> Cambridge Systematics, Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study Ridership and Revenue Forecasts (draft report, August 2007). It should be noted that this study is apparently only a draft, and was apparently not released until a month after the release of the DPEIR/S. If the DPEIR/S intended to rely on the report, the comment period should have been restarted from the report's publication.

<sup>9</sup> A quick reference to schedules for European train routes involving train splitting shows that it is commonly expected to be accomplished in 3-4 minutes. (See, Exhibit C attached hereto.)

<sup>10</sup> All relevant European equipment is modular.

<sup>11</sup> To be sure, passengers would need to be made aware of the need to check destination signs, but this is already the case where trains to several different destinations leave from the same platform. Again, European passengers seem to cope with this "problem" easily.

<sup>12</sup> Based on its mistaken presumption, the DPEIR/S presumes that trips to/from Southern California using an Altamont alignment must be divided between trains going to/from San Francisco and those going to/from San Jose, and assigns each origin/destination half the number of trains used for the Pacheco alignment. Ridership would obviously be greatly reduced by this error, as train frequency greatly affects ridership.

<sup>13</sup> While in the past train coupling confronted logistical problems in coordinating trains and schedules, current real-time capabilities, including accurate GPS location of trainsets and reliable communications both between trainsets and with the central dispatcher make trainset coordination eminently feasible. Indeed, it is done routinely with systems such as BART.

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operate a full trainset between two points. The trainsets have been designed as modular units that can be coupled together as pairs.<sup>14</sup>

For example, Thalys runs a high speed Paris-Köln-Amsterdam network that splits at Brussels. At peak hours, double sets run Paris-Köln or Paris-Amsterdam. However, at off-peak hours, when a double set cannot be justified, mixed-destination trains join and divide in Brussels. Thus, midday trains 9333 and 9433 depart Paris Gare du Nord coupled at 12:55pm, with one module running as 9333 to Amsterdam and the other as 9444 to Köln. Likewise, trains 9345 and 9445 leave Paris at 3:55pm and split in Brussels. This arrangement maintains frequencies on both branches despite a split in the route.

Similarly, the French tend to use splitting trains on their extensively-branched TGV network at the beginning and end of the day when loads are lighter. For example, weekday trains 6751 and 6781 leave Paris Gare de Lyon together at 7:14am and split at Dijon, with 6751 proceeding straight to Besançon and 6781 turning south to Chalon-sur-Saône. On the TGV Atlantique service, trains 8603 and 8705 leave Paris Montparnasse at 7:05am and split at Rennes, with 8603 running up Brittany's northern side to Brest and 8705 taking the southern side to Quimper.

The most systematic practice of splitting high-speed trains appears to be on the German ICE network between Berlin and Düsseldorf and Köln in the Ruhr district. The dispersed Ruhr cannot effectively be served by a single ICE route, so for 13 hours straight every day, the Deutsche Bahn runs hourly modular high-speed trains coupled east of Hamm, last Ruhr district stop. At Hamm, trains split or join, one module serving the northern tier of Ruhr cities, the other the southern. (The above examples are further documented in the attached schedules included herein as Exhibit C.)

If the ridership analysis had properly allowed for train splitting and joining, it is self-evident that the Altamont alternative would have much greater ridership (and also cost-effectiveness).

According to the Final PEIR/S for the statewide HST system, "Travel between Sacramento and San Francisco represents the third-largest intercity travel market in the state..." The largest number of intercity trips is projected to be between the Central Valley and major metropolitan areas, and the second-largest geographic market is between the Los Angeles and San Diego regions. (Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System, Page 1-6; see also DPEIR/S at p. 1-6.). By all rights, ridership between Los Angeles and the Bay Area should be roughly similar under either Altamont or Pacheco alignments.<sup>15</sup> When one also takes into account the added expected ridership

<sup>14</sup> See pictures included in Exhibit C, showing the linked trainsets used for such splitting/joining. This same point was made in the TRAC/CRF comment letter on the statewide HST EIR/EIS (Flashman letter, supra, at pp.7-8 and Attachments A-C thereto. The point was never responded to.)

<sup>15</sup> In fact, taking regional and sub-regional ridership into account, Altamont ridership would be expected to be somewhat higher, because the line would also draw upon the active ridership communities of the Northern San Joaquin Valley and the Tri-Valley Region of the East Bay, which would be excluded from a Pacheco alignment.

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between Sacramento, the northern San Joaquin Valley, and the Bay Area, ridership that would be almost nonexistent under the Pacheco alignment scenario<sup>16</sup>, it is clear that total system ridership, including regional and subregional trips, should be considerably higher under an Altamont alignment than for a Pacheco alignment.

The improper refusal of the ridership study associated with the DPEIR/S to accept the feasibility of coupling and uncoupling HST trainsets leads to an incorrect and biased set of ridership results that improperly and unfairly penalizes Altamont alignment ridership. In essence, the DPEIR/S analysis artificially constrains the model to produce lower ridership and revenue for the Altamont alternative than would be the case if operated under a service model that was consistent with projected statewide demand for intercity trips and the reality of modern HST operational parameters. The ridership studies need to be redone using accurate operational assumptions and the corresponding sections of the DPEIR/S also need to be appropriately rewritten to properly reflect the relative feasibility and financial viability of the two major alignments.

In addition to a revised, current, transparent and accurate ridership study, the following questions concerning ridership assumptions underlying the DPEIR/S must be answered in a revised DPEIR/S:

- How did growth projections along the two alignments (Altamont and Pacheco) factor into ridership assumptions? How much of this growth is induced by the prospect of HST stations in currently undeveloped areas along the Pacheco route?
- What assumptions underlie the huge recreation/other ridership on Pacheco? What is the documentation for these assumptions? How accurate are they?
- The boardings by station illustrated in Tables 2.3 and 2.4 of the Cambridge Systematics Ridership/Revenue Study need to be disaggregated so that intraregional trips are segregated from inter-regional and other trips. This is a first step to making the data clear and understandable.
- Given the large investment the HST system would make in upgrading rail infrastructure, it would appear reasonable, and indeed only prudent, to supplement statewide HST service with high-quality regional rail service, thereby providing an additional passenger rail alternative for access among points along this system. Why didn't the DPEIR/S consider and discuss the feasibility of such an "add-on" system and its relative effectiveness under the Altamont and Pacheco alignment alternatives?

<sup>16</sup> See attached Exhibit D showing population and distance for the two alignments. According to California Dept. of Finance figures, in 2006 there were over two million more Californians in bordering counties that would be directly served by the Altamont Alignment than the Pacheco Alignment. Moreover, selection of the Pacheco alignment would increase the travel time for a Sacramento to San Francisco trip by more than 50% compared to using the Altamont alignment (1hr 40 min [Pacheco] vs. 1 hr 3 min [Altamont]). Indeed, the San Francisco - Sacramento travel time via the Pacheco alignment is barely competitive with automotive or bus travel. If the Pacheco alignment is chosen, there would essentially be NO Sacramento to San Francisco HST ridership.

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**Comment Letter 0007 - Continued**

- There are ways to build bridges, especially rail bridges, so as to cause minimal disruption to their surroundings.<sup>17</sup> Why were alternative ways of constructing the Dumbarton Rail Bridge and various ways of mitigating any resulting environmental impact not discussed in the DPEIR/S?
- The DPEIR/S discounts the ability to use the renovated Dumbarton rail bridge proposed as part of the DRC for HST service across the Bay. While the DPEIR/S asserts that HST trainsets will be incompatible with Caltrain trainsets, the CHSRA is proposing to use the Southern California Metrolink system as part of the high-speed rail system. That system, like the DRC, would use a combination of diesel powered and electrified cars. Especially given the strong likelihood that all Caltrain trainsets, including the DRC, will move to using compatible electrified EMUs to reduce the system’s global warming impact, why would it not be feasible to single-track HST traffic over the DRC bridge, at least during the HST service’s initial phase?

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corridor/alignment and station locations. Specifically, the DPEIR/S fails to provide consistent and complete information concerning proposed HST alignment and station choices. Information that is provided is difficult to verify because the assumptions underlying the information are not provided or are located in documents not readily available or properly summarized in the DPEIR/S. (E.g. Why are certain previously-identified and apparently contemplated stations, such as the Los Banos Station, omitted? Is it contemplated that they could be added back into the system at a future date? If so, that option and its potential impacts should be discussed. Why are some HST features – stations and rail – specifically identified as being elevated or at grade? Wouldn’t it make more sense to leave such specific design considerations for a project level analysis? What is the single environmentally superior alignment under each of the Altamont and Pacheco alignment alternatives? How do those two alternatives compare? Couldn’t the Dumbarton Rail Corridor improvement project also be used by HST to reduce impacts to the Bay? etc.)

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**3. The DPEIR/S Fails to Adequately Describe Station Locations**

According to the DPEIR/S:

“Again, the ultimate locations and configurations of stations cannot be determined until the project-level environmental process has been completed.”  
At 2-29.

While the current programmatic level of analysis may not have sufficient information to provide detailed analyses of station locations, configurations, and their impacts, the PEIR/S must provide such information and associated analysis of impacts as is currently available. In some cases, the proposed station locations are obvious and already fixed. These include the stations (terminals) in San Francisco, San Jose, Sacramento, and Los Angeles. In other cases, there may be alternative locations possible. To the extent these possible station sites are currently known, they should also be identified and described, together with their potential associated impacts, including potential traffic and parking, air pollution, construction and growth-inducing impacts.

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Specific examples of the types of information missing from the project description of the HST options include, but are not limited to the following<sup>18</sup>:

- Potential for Freight Service. According to the DPEIR/S: “Although the Authority recognizes the potential for overnight medium-weight freight service on the proposed high-speed tracks, it has not been included in this analysis. Discussions with potential high-speed freight operators could be initiated as part of subsequent project development with appropriate analysis.” DPEIR/S at 2-7.
- Potential revenue from regional services such as the Altamont Commuter Express, which has been investigating the possibility of obtaining its own separate right-of-way rather than continuing to negotiate service on Union Pacific-owned tracks, thereby providing the ability to speed up the trains and avoid on-time performance problems frequently caused by Union Pacific operations. Such revenue from third parties can help lower bond costs and should be considered.

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In the absence of information of this type, it is impossible to render informed decisions regarding a preferred alignment and the locations and configurations of stations. Such choices cannot and should not be made until adequate information and associated analysis of impacts have been provided. A revised and recirculated PEIR/S must include this information and accordingly revised impact analyses.

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**4. The DPEIR/S Fails to Adequately Describe Other Key Features of the Project Alternatives**

According to the DPEIR/S, the Authority and FRA will rely on this document to select a preferred HST corridor/alignment, station locations, and recommended mitigation strategies based on the DPEIR/S. The lack of an adequate and complete project description does not support informed decision-making concerning the HST

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**E. The DPEIR/S Fails to Adequately Analyze the Project’s Significant Impacts**

The analysis of environmental impacts in the DPEIR/S fails to provide the necessary facts and analysis to allow the Authority, responsible agencies and the public to make an informed decision concerning the project alternatives (modal and HST related) and mitigation measures. CEQA requires that an EIR be detailed, complete, and reflect a

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<sup>17</sup> Examples of this can be found in the recent modifications to the eastern end of the San Mateo Bridge, the recently completed Benicia Bridge and MTC’s currently proposed Dumbarton rail bridge.

<sup>18</sup> Many of these project features were also the subject of comments on the 2004 statewide HST EIR/EIS.



**Comment Letter 0007 - Continued**

good faith effort at full disclosure. CEQA Guidelines section 15151. A fundamental purpose of an EIR is to “inform the public and responsible officials of the environmental consequences of their decisions before they are made.” Laurel Heights Improvement Assn. V. Regents of the University of California, 6 Cal.4<sup>th</sup> 1112, 1123 (1988). To do so, an EIR must contain facts and analysis, not just an agency’s conclusions. See Citizens of Goleta Valley v. Board of Supervisors, 52 Cal.3d 553, 568 (1990). Not only does the DPEIR/S fail to provide supporting evidence for its conclusions concerning the significance of project-related and cumulative impacts, in most cases, it is not possible to tell from the DPEIR/S whether an impact is considered significant, less than significant or reduced to less than significant after mitigation. Many discussions simply omit this basic information.

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The treatment of mitigation measures in the DPEIR/S is similarly deficient. Mitigation measures must be identified and analyzed. This DPEIR/S refers to the mitigation measures as mitigation “strategies.” The term “mitigation strategy” is not recognized or defined by CEQA or NEPA. In most cases the suggested “strategies” are so vague that it is not possible to determine their efficacy in reducing significant impacts to less than significant. Many of these so-called “mitigation strategies” consist of suggested actions, the details of which are deferred until after project actions are taken that commit the Authority to a specific course (e.g. specific HST alignment and station locations). This approach makes it impossible to evaluate the effectiveness of strategies to reduce impacts, and perhaps even more important, to compare the significant impacts after mitigation between the two major alignment options. In addition, CEQA cautions that “public agencies should not approve projects as proposed if there are...feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. . .” Pub. Res. Code section 21002. NEPA contains similar requirements. Here the DPEIR/S simply fails to identify feasible mitigation measures capable of mitigating the significant environmental impacts of the project alternatives and cumulative impacts.

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Moreover, “mitigation strategies” are simply listed at the end of each section. Specific measures are not called out for the purpose of mitigating specific alignment or station choices. This approach results in the document’s failure to identify the best choices in terms of matching potential mitigation measures and potential impacts. An EIR is not a Chinese restaurant menu where one can simply choose three from column A and three from column B. Decision makers need to understand beforehand what mitigation measures will be most effective for each potential impact, and whether that impact, after mitigation, will still be significant or not. With the current DPEIR/S, it is impossible to know any of this.

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This approach does not keep the DPEIR/S from concluding that potentially significant impacts can be mitigated. Numerous significant impacts are deemed by the DPEIR/S to be less than significant after vague and non-committal “mitigation strategies” are imposed (e.g. traffic and circulation). This approach violates CEQA and NEPA. A revised DPEIR/S must include specific feasible mitigation measures to address specific significant project-related and cumulative impacts, and indicate for each impact and

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mitigation measure combination whether the impact is expected to be significant after mitigation.

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Finally, the DPEIR/S improperly bases its analysis of the impacts associated with the HST Alternatives on a comparison with the No Project Alternative, rather than with existing baseline conditions. This approach is improper under both CEQA and NEPA, both of which require the analysis of impacts to be based on existing physical environmental conditions in the affected area at the time the notice of preparation is published. CEQA Guidelines section 15126.2. A revised DPEIR/S must include an analysis of the impacts of these alternatives with both the existing environmental conditions (at the time the NOP was issued) and with the No Project alternative.

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**1. The DPEIR/S Fails to Address Adequately Traffic, Transit, Circulation and Parking Impacts**

The analysis of traffic, transit, circulation and parking in the DPEIR/S is flawed for a number of reasons:

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First, potential impacts are improperly compared to the No Project Alternative instead of to existing environmental conditions. According to the DPEIR/S:

“The traffic, transit, circulation, and parking analyses focus on a broad comparison of potential impacts on traffic, transit, circulation, and parking along stations for the HST Alignment Alternatives and station location options. **Potential impacts are compared to the No Project Alternative.**” [Emphasis added.] DPEIR/S at 3.1-1.

CEQA generally defines a significant effect on the environment as a substantial or potentially substantial adverse change in the physical environment. Guidelines section 15358. “Environment” as used in this definition means, “the physical conditions that exist within the area affected by a proposed project, including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance.” Guidelines section 15360. The Guidelines go on to clarify:

“In assessing the impacts of a proposed project, the Lead Agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the NOP is published, or where no notice of preparation is published, at the time environmental analysis was commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to the ecological systems, and changes induced in population, distribution, population concentration, the human use of the land (including commercial and residential development), health and safety

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**Comment Letter 0007 – Continued**

problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected.” CEQA Guidelines section 15126.2.

NEPA similarly defines the baseline against which to compare the impacts of a proposed action as the pre-project environmental conditions. Many lead agencies use the time of the NOI as the baseline.

Here, the impacts are compared with the No Project Alternative and not existing environmental conditions. According to the DPEIR/S, the No Project Alternative includes existing conditions and future conditions projected to occur as of 2030 (e.g. funded and committed improvements based on Regional Transportation Plans (“RTPs”)):

- o “The No Project Alternative would include programmed and funded transportation improvements to the existing transportation system that will be implemented and operational by 2030. The primary differences between existing conditions and the No Project Alternative are the increased level of travel demand on local roads that lead to the stations and the implementation of new infrastructure.” DPEIR/S at 3.1-24.
- o “The No Project Alternative describes the study region without implementation of the HST system and is the basis for comparison of the HST Alignment Alternatives. The No Project Alternative represents the state’s transportation system (highway, air, and conventional rail) as it is currently and as it would be after implementation of programs or projects that are currently projected in RTPs, have identified funds for implementation, and are expected to be in place by 2030. This financially constrained level of infrastructure improvement (based on the expected federal, state, regional, and local funding) was analyzed in consideration of the considerable growth in population and transportation demand that is projected to occur by 2030. The No Project Alternative addresses the geographic area that serves the major destination markets for intercity travel that would be served by the proposed HST system in the study region. This area extends generally from the San Francisco Bay Area and Sacramento through the Central Valley.” At 2-19.
- o “The No Project Alternative satisfies the statutory requirements under CEQA and NEPA for an alternative that does not include any new action or project beyond what is already committed. The No Project Alternative includes the existing and future statewide intercity transportation system based on programmed and funded improvements through 2030, according to the following sources...”. at 2-19-20
- o “The No Project Alternative includes this existing highway system, as well as funded and programmed improvements on the intercity highway network based

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on financially constrained RTPs developed by regional transportation funding agencies.” At 2-20. emphasis added.

While the DPEIR/S implies that the analysis compared the HST project alternatives to both the existing environmental conditions (2005) and to the No-Project Alternative (2030 No-Build), in fact, the project alternatives are only compared to the No-Project “future” scenario. There is no analysis comparing “2005” existing conditions plus HST project alternatives with “2005” existing conditions.<sup>19</sup> Examples of this flawed approach to the impact analysis occur throughout the section and include, but are not limited to the following:

“Based on travel forecasts with and without HST alternatives, overall intercity highway conditions would improve with HST.” DPEIR/S at 3.1-25.

“In the case of the Altamont Pass alternatives, the V/C for the US 101 link between San Francisco to San Francisco Airport would decrease by about 3% as compared to the No Project alternative.” DPEIR/S at 3.1-16.

This approach results in confusing, obscuring and very likely minimizing the “true” impacts of introducing HST service to traffic, transit, circulation, parking as well as many other potentially significant impacts including, but not limited to biological resources, impacts to parks, impacts on agriculture, growth inducement and population and housing, among other impacts. See Tables 3.1-2 and 3.1-3 which include 2005 conditions as information, but only analyzes HST project alternatives with the 2030 No Build conditions). Such an analysis would also shed light on how the introduction of HST service might change whether, how and where circulation, parking, transit and other transportation improvements are made over the next 20+ years. For example, if the Pacheco alignment, which would serve an area currently much less populated than that for the Altamont alignment, is selected, would additional non-HST transportation infrastructure need to be built beyond what is currently contemplated, in order to serve the growth induced by the introduction of HST? A revised analysis must be developed that analyzes the HST project alternatives compared to the environment as it exists. Without this analysis, the DPEIR/S is fatally flawed. Questions that we request be addressed in either the response to comments or a revised DPEIR/S concerning this issue include:

- o What are the impacts of the HST project alternatives (without programmed and funded improvements beyond existing conditions) on existing traffic, transit, circulation and parking conditions? See e.g. CEQA Significance Criteria bullet one at page 3.1-3: “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).”

<sup>19</sup> We understand the model limitations. However, this information can be generated by manipulating the model or by manual calculations if necessary to comply with CEQA and NEPA requirements for analyzing the proposed project compared to existing conditions.

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- What transportation system needs, and associated projects (roads, parking, other types of transit) not currently programmed, funded or even contemplated, would be “induced” (e.g. new roads, road widening, etc.) in the alternative project areas if HST is introduced and in turn induces new growth? 0007-75
- What are the impacts if a more traditional approach is taken and instead of using the “sum of the AM and PM 3-hr peak periods,” the traffic analysis is based on the peak period (AM or PM) to determine the impacts of the introduction of HST project alternative on Existing Conditions and on No-Build (No Project Alternative)? The model should be re-run to determine these impacts. 0007-76
- In the DPEIR/S description of the difference between existing conditions and the No Project; [“The primary differences between existing conditions and the No Project Alternative are the increased level of travel demand on local roads that lead to the stations and the implementation of new infrastructure.” DPEIR/S at 3.1-24]; the text implies that under future conditions there would be more trips to the stations. This further implies that the No Project alternative is already altered by the introduction of the HST project alternatives. Please clarify the differences between existing conditions and No Project and whether the No Project includes HST stations in the analysis. If it does, the HST analysis needs to be revised so that the analysis is clearly No Project 2030 conditions with and without any HST project features including HST station locations. 0007-77
- Explain how the introduction of HST to the Pacheco area would not result in inducing new roadways and highway improvements to serve new growth induced by HST above and beyond the programmed and funded circulation system projects included in the No Project 2030 scenario. 0007-78

Second, omitted and inadequate project description information makes it impossible to adequately evaluate project related impacts on traffic and circulation. Examples of omitted or inadequate project description elements that result in an underestimation of traffic impacts include, but are not limited to: construction activities including construction haul routes, construction related trips, current and adequate information about ridership on the different modes, consistent assumptions concerning catchment areas (i.e. the distance people will travel to ride HST), information about all potential uses (e.g. freight) of HST as well as other information. In addition, the inclusion of programmed and funded circulation improvements in the No Project Alternative serves to reduce certain impacts that could be greater under the comparison of current baseline conditions to baseline plus HST only.<sup>20</sup> As a result, the DPEIR/S likely significantly underestimates impacts to traffic and circulation because the project description omits 0007-79

<sup>20</sup> It seems obvious that such a summation could mask a significant traffic impact. If, for example, the project resulted in shifting some traffic on a road segment from the AM peak to the PM peak, the AM+PM sum would be constant, but the PM peak could be elevated to the point of having a significant impact.  
<sup>21</sup> Just because a highway improvement has been programmed and funded does not mean that it will necessarily be built. Project funding can be reprogrammed to other, more urgent, projects, leaving the improvement unimplemented.

adequate and complete information about the true extent of project-related impacts and fails to adequately analyze impacts. 0007-79 Cont.

Third, the DPEIR/S analysis of HST impacts to intercity highway conditions focuses solely on the trips that would be diverted on the future circulation system with the introduction of HST and fails to analyze how/what circulation system improvements would be induced by the introduction of HST. Such an analysis must also include the potential environmental, social and economic impacts of these new facilities and improvements. See e.g. DPEIR/S at 3.1-15. This omits much of the required analysis. Like the parking analysis, which refers to new parking being provided to support HST stations where needed, the analysis of circulation and transit systems must identify additional circulation and transit facilities that will be required because of the introduction of HST. The improvements could include, but are not limited to: new roads/road or highway improvements to serve stations and/or induced growth; feeder buses and new stops; other supportive facilities (e.g. maintenance/repair yards/corp type yards etc.). The analysis must not only identify these facilities and improvements, but also analyze their impacts. While some of these could be considered “mitigation” (see e.g. page 3.1-38), many of these facilities and improvements are just as likely to occur to deal with new growth and demand. In either case, impacts related to mitigation measures must also be considered in the EIR/S. 0007-80

Fourth, the DPEIR/S fails to analyze impacts to operations of existing transit lines and the impacts to neighborhoods of additional infrastructure that will be required to maintain mobility. For example, the DPEIR/S fails to consider that the Caltrain line is already saturated with eight trains in each direction per hour, and yet for both current and future increased levels of service there is no need to quadruple-track the entire Caltrain line between Redwood City and Santa Clara in the absence of high-speed rail. Quadruple-tracking this segment for HSR under the Pacheco alternative, provides no additional mobility or benefits to local service to those neighborhoods but only unnecessary impacts. These impacts could be avoided under the Altamont alignment alternative. On the other hand, Caltrain does require passing tracks to be constructed between Redwood City, San Mateo and Millbrae in order to be able to operate at a moderately greater frequency than it does today. This section of the Caltrain line would obtain mutual gain with reconstruction for HSR under either the Altamont and Pacheco alternatives. Similarly, construction of an Altamont alignment for HSR would facilitate the introduction of regional rail services between the San Joaquin valley and the Peninsula/San Jose at frequencies ten-fold greater than possible today. The DPEIR/S fails to consider the constrained capacity of the planned San Francisco Transbay Terminal to serve as the endpoint of all trains. It makes the highly implausible assumption that an 8-track second story could be built 30 feet above the existing San Jose Diridon station to provide needed capacity while maintaining this station as a working station with ongoing operations, and all this for only \$185 million. (DPEIR/S at 4-4 [Table 4.2-1]; 4-13 [Table 4.2-2].) It should be noted that the San Jose Diridon station is already the busiest in California because of the confluence of freight and several passenger operations there. 0007-81



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Fifth, the DPEIR/S improperly defers mitigation measures that could potentially reduce impacts to traffic and transit. According to the DPEIR/S:

“The Authority would expect to participate in developing potential construction and operational mitigation measures in consultation with state, federal, regional, and local governments and affected transit agencies during project-level reviews.” DPEIR/S at 3.1-38.

“Program-level mitigation strategies would be further refined, and specific measures would be considered during project-level environmental reviews where impacts are found to be significant at the project level. Potential mitigation strategies to be considered during project-level environmental reviews would include the following, listed below by regional and local applications.” DPEIR/S at 3.1-39.

The list of mitigation strategies includes a number of facility and infrastructure improvements such as providing additional parking, widening roadways, improving street capacities, and the like.

“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.” Id. at 3.1-40.

In some cases, for example in the Downtown Fremont and Tracy areas, mitigation measures could make the difference in the environmental superiority of an alignment or station choice. It is only at this early stage that the Authority can design wide-ranging measures to mitigate environmental impacts. See Guidelines § 15168(b)(4) (programmatic EIR “[a]llows the lead agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility. . . .”). Failing to evaluate mitigation measure and/or deferring the evaluation to the future thus violates CEQA [and NEPA].

Feasible mitigation measures must be identified and in the case of more detailed decisions concerning HST alignments and stations, additional details concerning these project descriptions needs to be provided. It is not appropriate to make station and alignment choices based on the possibility that significant impacts to traffic and circulation “might” be avoided by as yet undetermined mitigation measures or that people may be encouraged in greater numbers than ever before to choose transit over their single occupancy vehicle. In particular, it is inappropriate to assume potential impacts will be mitigated in the absence of substantial evidence that mitigation is feasible or a commitment to achieving standards that will assure an absence of significant impacts.

Finally, a number of mitigation measures will in turn have significant impacts that are not analyzed in the DPEIR/S. For example, major transportation improvements are identified as potential mitigation to alleviate congestion. A revised DPEIR/S must analyze the

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indirect or secondary impacts of these measures. In addition, the feasibility of acquiring rights-of-way to accommodate proposed HST alignments and stations must also be addressed in terms of feasibility, cost and other factors. A map or maps showing major ownerships of property not already in the Authority’s control must be produced with supporting text indicating the feasibility and estimated cost of acquiring key properties and parcels. This same information should be used for a revised growth-inducing section.

The DPEIR/S fails altogether to analyze the physical environmental impacts of the mitigation measures including, but not limited to: local spot widening of curves, major intersection improvements, acquisition to accommodate widening projects, and provision of additional parking. DPEIR/S at 3.1-38. Impacts associated with mitigation measures where they could be significant must be analyzed in a revised EIR/S.

Remarkably, after identifying numerous significant impacts of HST on traffic and circulation, the DPEIR/S concludes that all potentially significant traffic and circulation impacts of the HST alternative will be reduced to less than significant *with* mitigation. Mitigation consists of deferred “strategies” including “encouraging” the use of transit and working with transit providers to improve station connections, among other deferred strategies. However, such “strategies” are not adequate mitigation unless they are accompanied by 1) substantial evidence showing that they will reduce impacts to a level of insignificant or, 2) at the least, a commitment to reach defined standards that will assure that no significant impacts will result. For example, a standard requiring that transit ridership will be increased by a certain percentage, along with feasible strategies to achieve this standard (e.g., subsidized transit passes, transit promotion agreements with municipalities and major employers, local parking pricing and/or road pricing programs implemented by municipalities, etc.) could demonstrate that levels of transit use will be achieved that will reduce potential impacts to a level of insignificance. Such standards and evidence have not, however, been included in the DPEIR/S. This, along with other statements in this section of the DPEIR/S underscore the reasons why this document is not adequate to support informed decision-making concerning Bay Area – Central Valley HST alignments and stations.

Lastly, the DPEIR/S fails to reach conclusions supported by evidence concerning the significance of traffic impacts for any of the alternatives. A revised DPEIR/S must identify the significant impacts of each alternative before and after mitigation.

**2. The DPEIR/S Fails to Address Adequately Travel Condition Impacts**

Like the transportation section, potential impacts to travel conditions are improperly compared to the No Project Alternative instead of to existing environmental conditions. According to the DPEIR/S:

“The No Project Alternative includes programmed and funded transportation improvements to the existing transportation system that will be implemented and operational by 2030.” At 3.2-6.

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“This section presents expected travel conditions for the HST alternatives and compares relative differences between No Project and the HST.” At 3.2-8. See also Table 3.2-6 which provides existing conditions, but only compares the 2030 Air Mode travel times with and without HST. See also Table 3.2-12 and 3.2-13 comparing 2030 intercity trips for auto, air, Amtrak rail and HST under base case and high end 2030 trip shares.

The fatal flaw with this approach is that there is no dissection of the impacts to travel conditions induced by the introduction of HST from the changes induced from programmed and funded circulation improvements [and growth]. Only with an analysis of HST against existing baseline conditions with and without HST and future conditions with and without HST can the true extent of project-related impacts be known, disclosed and mitigated.

**3. The DPEIR/S Fails to Adequately Analyze Air Quality Impacts**

The DPEIR/S fails to adequately and accurately evaluate the potentially significant air quality impacts of HST as a result of faulty methodology. Again, the DPEIR/S fails to analyze the HST project alternatives compared to existing conditions. The approach taken in the Air Quality analysis is:

“A comparison of the 2005 conditions to the 2030 No Project conditions illustrates the expected trends in air quality. Currently, CARB has not released 2030 emission inventory information. For the purposes of this analysis, emission burdens were projected to 2030, based on CARB emission burden data from 2005-2020. The potential impacts from proposed alternatives were then added to the 2030 conditions. Changes in VMT from on-road mobile sources (vehicles) and for off-road mobile sources (number of plane operations and train movements) were estimated for each of the alternatives. Changes in emissions of stationary sources (electrical power generators) were also addressed.” DPEIR/S at 3.3-5.

“To determine if the project has significant air quality impacts as defined by CEQA, the relevance of the potential emission changes was assessed from a total pollutant burden and percentage change compared to the No Project Alternative in the affected air basins and statewide.” DPEIR/S at 3.3-6

“The assessment is based on the total pollutant burden of an area under the No Project Alternative and the change in emissions estimated under a proposed alternative.” DPEIR/S at 3.3-7.

While the section compares existing conditions to the No Project Alternative [concluding that with respect to CO, NOx and TOG, emissions will be lower; PM10 higher than 2005 conditions] the section again only compares the HST Alternatives to No Project Alternatives and fails to compare the HST Alternatives to existing conditions:

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“Roadways: The proposed HST Alignment Alternatives could potentially result in a daily reduction of 32.691 million VMT compared to the No Project Alternative...” 3.3-13

“Air Travel”: The air-travel component is based on 43,865 daily trips (1 trip = 1 takeoff and 1 landing), or 433 statewide, being shifted from the airplane component of No Project future conditions to the proposed HST Alignment Alternatives...” 3.3-13.

“Summary of Pollutants”: Table 3.3-7 summarizes the combined sources categories for existing conditions and the No Project Alternative and the HST Alignment Alternatives. Compared to the No Project Alternative, the proposed HST Alignment Alternatives are projected to result in a decrease in the amount of pollutants statewide and in all basins analyzed.” 3.3-14. See Table 3.3-4 which summarizes the No Project and HST Alignment Alternatives for On-Road Mobile Source Regional Emissions.

Second, the DPEIR/S fails to adequately analyze the project’s contribution to greenhouse gas emissions or to give any consideration to likely changes in weather patterns and climate as a result of global warming. The Attorney General’s office has made it clear that projects such as HST must analyze and mitigate impacts associated with global climate change. See Exhibit E hereto. While the DPEIR/S briefly refers to global warming and contains limited analysis, the document’s approach is inadequate. According to the DPEIR/S:

“Changes in the amounts of CO2 (which is a major component of greenhouse gases) as a result of the project alternatives were estimated on a statewide basis. These results are provided to indicate how changes in CO2 emissions, as a result of the HST Alignment Alternatives, might affect global warming. These estimates were based on the estimated changes in fuel use and electrical energy production associated with the HST Alignment Alternatives.” At 3.3-7. See also 3.3-10.

“Year 2005 CO2 emissions were estimated at 1.280 million tons/day.” 3.3-13.

“CO2 calculations for the alignment alternatives reflect only emissions from electrical power stations, planes, and on-road VMT.” 3.3-14.

The DPEIR/S fails to include thorough discussion, analysis or mitigation for the project and cumulative project contribution to global warming impacts. The technical planning and scientific tools to assess global warming impact and feasible mitigation already exist.

A report by the Association of Environmental Professionals (AEP) includes the following recognition of the importance of climate change:

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**Comment Letter 0007 - Continued**

*"In California, global climate change is a growing concern that must be addressed in CEQA documents."*

The Report includes a recommended approach for assessing a project's contribution to global climate change. The approach is based on two key components: first, provide an inventory of greenhouse gas emissions; and second, include mitigation strategies identified in the California Climate Action Team (CCAT) Report. The CCAT mitigation was developed to provide sufficient greenhouse gas reductions necessary to meet the Governor's greenhouse gas reduction targets (targets are discussed further below).

A project-specific inventory of greenhouse gases can be quantified based on existing emissions models. Specifically, CARB has released the EMFAC 2007 emissions model to quantify on-road vehicle emissions; this model is used extensively for a broad range of applications by a wide variety of agencies, and produces estimates of vehicle-related CO2 emissions. CEQA's primary interest in comprehensively estimating a project's environmental impacts dictates that those greenhouse gas emissions must be quantified, discussed, and mitigated using all reasonable, feasible means. Operational CO2 emissions derived from URBEMIS modeling have, in a number of CEQA cases, been multiplied by 100 as an analogue to predict a project's lifetime CO2 increment. This calculation is relevant to the construction period and vehicle trips related to ridership and operations of HST. It is vitally important that the PEIR/S quantify, to the extent feasible, the overall CO2 contributions each of the various alternative alignments would make, including not only direct contributions from the Project and project-related vehicle trips (e.g., passenger trips to/from stations), but also indirect effects related to the Project's growth-inducing impacts.

Other contributors to greenhouse gas emissions include electricity, burning of natural gas and loss of lands that currently sequester carbon. HST will rely on some source of electricity to operate the trains.

"Electricity as energy is given detailed consideration in this analysis because of the projected use of electric energy to power the proposed HST system." DPEIR/S at 3.5-6

"This analysis is concerned with the adequacy of the generation and transmission infrastructure to accommodate the inclusion of the HST system in the state's electricity grid; distribution issues are not considered at this program level of analysis." Id.

"Emission changes from power generation can therefore be predicted on a statewide level only. In addition, because of the state requirement that an increasing fraction of electricity generated for the state's power portfolio come from renewable energy sources, the emissions generated from the HST system are expected to be lower in the future as compared to emissions generated based on the state's current power portfolio." At 3.3-6.

Electricity generation accounts for approximately 21 percent of GHG emissions in California. The EIR states that HST operations would annually consume approximately 386 million barrels of oil and increase the load on statewide electric power by an

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estimated 794 MW during the peak period in 2030. During construction, energy consumption for the HST system is estimated to be approximately 128 MMBTU's or 22 million barrels of oil. DPEIR/S at 9-1. While this may be a reduction over the No Project Alternative, it is still an increase in energy use. The amount of carbon emissions resulting from this demand is easily calculated: According to the Energy Star Program, a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy, one kilowatt hour consumed equates to 1.55 pounds of CO2 emissions.<sup>22</sup> The EIR should have included this calculation for the various alignment options included in the DPEIR/S.

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Even as various human processes send carbon into the atmosphere, trees take up and store carbon in a process known as carbon sequestration. Climate Action Team Report at 48-49. Agricultural lands similarly take up carbon as do other open space lands.<sup>23</sup> Carbon that is sequestered is not free in the atmosphere and thus does not contribute to the greenhouse effect. The loss of large amounts of trees and agricultural land results in less carbon sequestration, which in turn exacerbates the effects of global climate change. Therefore, any EIR prepared for a project, like this one, that will affect large forested and agricultural areas must analyze the effects of deforestation and conversion of land to nonagricultural uses on global climate change.

The second component of any global warming emissions approach stresses inclusion of mitigation strategies identified in the CCAT Report. According to AEP, the mitigation strategies in the CCAT Report "are the most appropriate to use at this time because the report 'proposes a path to achieve the Governor's targets that will build on voluntary actions of California businesses, local government, and community actions, and State incentive and regulatory programs."<sup>24</sup> Many of the CCAT mitigation measures noted below should have been thoroughly evaluated for mitigation instead of deferred as the DPEIR/S currently does:

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- o Vehicle trip reduction strategies (paid parking, parking cash-out, etc.);
- o Providing multi-modal transportation options;
- o Increasing energy efficiency beyond Title 24 requirements;
- o Increasing recycling; and
- o Incorporating green building technology.

In the opinion of AEP, if a project complies with applicable measures noted above, the project could be considered to have a less than significant cumulative impact to global

<sup>22</sup> It is important to note that the Authority, not the public, bears the responsibility for choosing or developing a methodology for determining impacts. We offer these suggested formulae to help the guide the EIR's preparers in the necessary revisions, and to demonstrate that these calculations are not arcane but are actually quite easily performed.

<sup>23</sup> Of course, such sequestration is rarely permanent. For farmlands, some of the sequestered CO2 will be re-released as food is consumed and other agricultural products used up or biodegraded. However, there will usually be a net sequestration which, depending on the crop involved, can be highly significant.

<sup>24</sup> AEP White Paper on Global Climate Change, p. 10.



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climate change.<sup>25</sup> Without these mitigation measures, the project is considered to contribute significantly to global climate change, an environmental process relevant to CEQA.

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effects that may follow from the project’s direct physical environmental consequences. (CEQA Guidelines section 15064(d)(2).)

The DPEIR/S as currently drafted fails to incorporate feasible climate change mitigation and fails any attempt to estimate its impact to climate change. Such impacts must include increased CO2 production related to the growth induced by the introduction of HST to currently undeveloped areas, particularly along the Pacheco alignment. HST will cause such cumulative emissions increases and therefore must analyze them.

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Rather than taking the issue on forthrightly the DPEIR/S is largely silent on the issue, giving the appearance that the HSRA wishes to have HST excused from its CEQA responsibilities to estimate and then mitigate project-specific CO2 emissions. At minimum, a revised DPEIR/S must be drafted to correct these omissions and then re-circulated to allow public review of the following:

The State of California has also acknowledged the environmental impacts of greenhouse gas emissions on climate change. According to Governor Schwarzenegger’s June 1, 2005 Executive Order, global warming, left unchecked, will accelerate coastal erosion, degrade air quality, increase wildfires, reduce water supplies, and intensify heat waves – all concerns to the State and its citizens. (See [California Climate Change Center, Our Changing Climate: Assessing the Risk to California](#); Executive Order S-3-05.) The Governor’s Executive Order established the following greenhouse gas reduction targets:

- By 2010, Reduce to 2000 Emission Levels
- By 2020, Reduce to 1990 Emission Levels
- By 2050, Reduce to 80 percent Below 1990 Levels

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1. A revised regional setting discussion which includes background information on global warming and climate change, State, regional and local targets and the status of any regional inventory;
2. An inventory of all the greenhouse gas emissions (i.e. carbon dioxide, methane, nitrous oxide, other) generated by the various project alternatives (both during construction and operation) and cumulative and growth inducement elements;
3. Discussion and incorporation of all feasible mitigation as identified by CCAT.

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Among the feasible mitigation measures alluded to in the DPEIR/S are to run the trains on 100% clean, zero carbon emissions electricity. Such an approach should be a mandatory mitigation requirement of HST:

If these targets are not achieved, the State of California and its resource agencies believe California will suffer serious and significant degradation of its natural environment, causing widespread environmental damage along with disproportionate harm to those with low incomes and those living in the already congested Bay Area air basin. Nothing in the DPEIR/S’s treatment of CO2 emissions demonstrates leadership by the High Speed Rail Authority in characterizing and reducing global warming impacts, and this approach is both inconsistent and contradictory to actions taken by the Governor’s office and the State’s Attorney General’s office in the last twelve months.

Insufficient re: Electrical Power...see 3.3-14. “if it is decided that the project would be run on 100% clean, zero-carbon emissions electricity, there would be no predicted increase in CO2 levels due to the project’s increased electrical requirements.” 3.3-14.

In addition, like other transit agencies including but not limited to AC Transit, all HST associated facilities (e.g. stations, maintenance yards, fleets, etc.) should be carbon neutral. In describing how carbon neutrality will be achieved, a revised EIR/S should indicate whether this is simply a shift in clean power to HST or achieved as a total reduction of polluting energy sources statewide.

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Third, the DPEIR/S improperly defers mitigation measures that could potentially reduce construction period and operation-related air quality impacts. According to the DPEIR/S:

Increasingly over the last one to two years, the State’s former and current Attorneys General have urged Lead Agencies to include analysis of global warming impacts in their environmental documents because *it is a requirement of CEQA*.<sup>26</sup> The basis for requiring an environmental review to disclose and analyze this impact is essential CEQA—the California Environmental Quality Act requires government agencies to disclose and analyze all of a project’s potentially significant environmental impacts and to make every reasonable effort to avoid, diminish, or mitigate those harmful effects. CEQA defines significant impacts broadly and inclusively and its definition includes not only the direct environmental consequences of implementing the project, but any indirect

“The program-level analysis in this document reviews the potential statewide air quality impacts of a proposed HST system, and the analysis would support determination of conformity for the proposed HST system. At the project level, potential mitigation strategies should be explored to address potential localized impacts.” DPEIR/S at 3.3-19.

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Deferred measures include: increased use of public transit, increased use of alternative-fueled vehicles; increased parking for carpools, bicycles and other modes of transportation. In addition, the DPEIR/S states: “Potential construction impacts, which should be analyzed once more detailed project plans are available, can be mitigated by following local and state guidelines.” DPEIR/S at 3.3-20. A general list of typical construction-period measures is provided, including replanting vegetation, minimizing equipment idling and the like. While in some cases deferral of identifying specific

<sup>25</sup> Ibid, p. 2

<sup>26</sup> In August of this year, the California Attorney General, Jerry Brown, reached settlement with San Bernardino County over its approval of a General Plan update that violated the California Environmental Quality Act by not fully evaluating and addressing foreseeable effects on global temperatures, air quality and natural resources. The settlement requires the county to take specific actions to reduce its global warming impacts. The PEIR/S should consider the applicability of the settlement agreement’s provisions to this statewide energy-intensive project.



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mitigation measures may be appropriate, where, for example, specific station locations or construction technique application may call for specific measures, some operational and construction-related mitigation measures can be identified even at the programmatic level. These include, for example, the use of electric-powered, as opposed to diesel-powered construction equipment where feasible, and the use of low emission diesel equipment where diesel equipment must be used. The PEIR/S should be modified to explicitly identify those measures that can, even at this stage, be committed to, and discuss the potential of these measures to fully or partially mitigate project impacts.

Finally, feasible mitigation measures to address the potentially significant and unavoidable air quality impacts of all alternatives must be included in a revised DPEIR/S. Such measures include, but are not limited to measures that require cleaner construction vehicles, 100 percent clean energy, urban forestry, green building standards, and most importantly, directing these transportation improvements and all state transportation funding to occur in urban areas, rather than in undeveloped areas where they will promote sprawl, with its associated increased auto use and air quality and CO2 emission impacts (as is particularly the case with many of the proposed segment and station alternatives included within the Pacheco alignment options).

**4. The DPEIR/S Fails to Adequately Analyze Agricultural Impacts**

The DPEIR/S’s approach to analyzing impacts to agricultural land is flawed for a number of reasons. Like the other topic areas, impacts to agricultural land are improperly evaluated against the No Project Alternative future condition rather than existing conditions:

“The No Project Alternative assumes that, in addition to existing conditions, additional transportation improvements would be developed and operational by 2030...It was not possible as part of this study to identify or quantify the amount of farmland that might be affected by the transportation improvements in the No Project Alternative.” DPEIR/S at 3.8-5.

This approach results in underestimating the true extent of growth-inducing impacts associated with the introduction of HST to currently undeveloped agricultural lands along the Pacheco alignment especially.

In addition, the approach taken to calculating impacts to farmland is flawed. For HST impacts on agricultural lands, the study area was determined to be 100 feet from the rail right of way or rail centerline in the case of the HST being located off an existing rail line. According to the DPEIR/S, this is a conservative study area, because it would be possible to fit the HST line within a 50 foot right-of-way in constrained areas. DPEIR/S at 3.8-4. This approach grossly underestimates the impacts of these alternatives on agriculture and farmland. For example, where the HST right of way divides an agricultural field, unless provisions are made to allow frequent undercrossings of farm equipment, the alignment will effectively sever the property, making it significantly more difficult and expensive to keep it in production. Indeed, where the HST line severs

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a small portion of land, that land will almost certainly be taken out of production, and will more than likely be sold off for non-agricultural use. In addition to the agricultural impacts, such land conversions will likely contribute to the project’s growth-inducing impacts.

The analysis also fails to analyze impacts to agricultural infrastructure necessary to sustain ongoing agriculture. The analysis only considers potential “severance” of farmland or loss of farmland acres. DPEIR/S at 3.8-10. Because the project description is lacking, these discussions fail to disclose the significance of these impacts. Also according to the DPEIR/S:

“Parcel-specific information was not considered in this program-level analysis. Project-level farmland severance impacts would be addressed in subsequent project-level documents.” DPEIR/S at 3.8-10.

Deferral of this analysis is improper under both CEQA and NEPA and will result in depriving decision-makers at this key point of alignment selection from information concerning comparative impacts to agricultural land. A revised PEIR/S must provide this information in association with the Pacheco and Altamont alignments and station location choices. Questions that must be answered include but are not limited to the following:

- How much agricultural land must be acquired for each alternative?
- What is the estimated cost?
- How much more agricultural land will be lost due to fragmentation and severance impacts of the respective alternatives?
- What is the total estimated value of the agricultural production lost under each alternative?

Moreover, the DPEIR/S overlooks the impacts of the project on grazing. This impact is simply deferred until a later analysis. The DPEIR/S ignores the spillover effects of residential development on farming operations. As will be discussed further below, unless specific measures are taken to avoid or mitigate growth-inducing impacts, the HST project can be expected to induce significant amounts of new residential growth along its right of way and especially where train stations are placed. Such residential development will predictably interfere with continued grazing operations. According to a review by the American Farmland Trust, these spillover effects could affect 2 to 3 times as much farmland as is actually converted as a result of new residential uses conflicting with farmland uses.<sup>27</sup>

Mitigation strategies for agricultural impacts are also improperly deferred. While the DPEIR/S identifies appropriate strategies, they would be considered in the future at a project-level. Of course the most significant “mitigation measure” the Authority could implement is the selection of the Altamont Alignment which would be clearly superior with respect to protecting agricultural land. Specific mitigation measures that must be

<sup>27</sup> See the page 7 of the comment letter from American Farmland Trust dated 8/5/2004, HSR Final Statewide EIR/S page 5-236

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included in a revised and recirculated DPEIR/S include but are not limited to purchase of agricultural easements to protect farmland before HST is introduced, urban growth boundaries and smart growth zoning in communities served by HST. In addition, a revised DPEIR/S must provide evidence that proposed mitigation measures will actually reduce or eliminate the significant conversion of farmland.

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**5. The DPEIR/S Fails to Adequately Analyze Biological Resource Impacts.**

Once the presence of biological resources in a project site have been identified and described, a DPEIR/S must then analyze how the direct and indirect impacts of the project and cumulative projects would affect resources. As set forth in the CEQA Guidelines Section 15126(a):

Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to the ecological systems, and . . . .

The DPEIR/S does not disclose the Project’s (including all alternatives) impact to the physical environment and its corresponding effect on biological resources as required under CEQA and NEPA for a number of reasons including, but not limited to the lack of adequate and complete setting information, inadequate analysis of impacts and failure to identify feasible mitigation measures. Our summary of the significant flaws and omissions in the DPEIR/S with respect to biological resources follows.

In general, the discussion of the Regulatory Requirements and Methods of Evaluation is misleading and does not meet the intent or standards for CEQA significance determinations. The description in the Affected Environment lacks crucial information necessary to allow a complete assessment of impacts, and thus the Environmental Consequences of the project are not fully assessed and are under-represented. Furthermore, a lack of information and analysis raises the question of bias in the document. Because two of the major alignment alternatives – Altamont Pass and Pacheco Pass differ with respect to many of the resources that were not adequately described or assessed, the conclusions regarding the relative impacts of these two alternatives are potentially misleading.

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An overarching problem with the analysis is that there is no real synthesis or interpretation of the biological resources information available for the project alignments. The document essentially presents raw data on biological resources and impacts (numbers of species, acres of wetlands, etc.) but these data are never meaningfully discussed or interpreted. The purpose of the EIR/EIS is to present technical information in a meaningful and understandable way, so that the public and decision-makers can be adequately informed and do not have to synthesize and interpret raw data themselves. The mere presentation of data, without sufficient analysis for the public and decision makers to evaluate the impacts represented by the data and their relative significance,

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does not satisfy CEQA’s mandate of providing decision makers with the information they need to make a decision that is fully informed by the environmental impacts that decision will have. For example, the EIR/EIS should discuss the quality and regional importance of the biological resources in the various alignment segments and describe the nature and magnitude of the impacts to these resources, rather than just list the resources present and impacted. While the DPEIR/S provides various tables listing biological resources, it does not provide an analysis of the relative significance of different resources and impacts on resources. In particular, it is crucial to explain clearly the relative significance of impacts on biological resources from choosing the Altamont vs the Pacheco alignment. That information is not adequately provided in the DPEIR/S, and in its absence the DPEIR/S is inadequate. Other specific issues and examples are discussed further below.

The discussion in the DPEIR/EIS on the Regulatory Requirements and Methods of Evaluation seems to ignore a central purpose of CEQA: to disclose when projects may have significant effects on the environment. Significant effects are defined as substantial, or potentially substantial, adverse change in any of the physical conditions with the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. The significance criteria defined for the HST evaluation are largely focused on “sensitive” resources (e.g., special status species and their habitats) or those protected by specific regulations or policies (e.g., wetlands, HCP or NCCP plans). This does not meet the CEQA’s requirement to disclose any of the potentially significant impacts to the flora and fauna of California, not just impacts to those with regulatory status. The analysis must assess the potential impacts of the project alternatives within a broader biological context – where are existing biological resources, regardless of their regulatory status, likely to be significantly affected by the project and what are the nature and magnitude of those impacts? This specifically needs to include consideration of cumulative impacts, including ecosystem impacts and impacts on clusters of ecosystems. This is particularly important for a project such as a HST, which has the potential to physically divide land areas and create relatively impassable barriers.<sup>28</sup> The document’s significance criteria should be expanded to include impacts that would degrade or sever high quality and intact habitats, functional watersheds and wetland systems, regional functions of existing conserved natural areas, etc. – i.e., should assess impacts to high priority conservation targets for public agencies and conservation organizations in California.

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The discussion of the Affected Environment is presented in a piecemeal fashion and does not describe the overall resource values within the project area. The Affected Environment discussion is critical to the analysis of impacts and to allow the nature of the impacts to be placed into their appropriate biological context. The document lists the species, habitats, water resources, wildlife corridors, and management plans that are present in each HST corridor. However, there is no context provided or interpretation of this information that allows the quality, integrity, value, or importance of these resources to be assessed and how they would be impacted by each of the alternatives. The

<sup>28</sup> While the tracks themselves may be relatively easily crossed, the additional fencing that will be needed to keep people and animals away from the tracks to prevent accidents will make the HST right-of-way an obstacle every bit as ecologically damaging as an eight-lane freeway.



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document states that, “At this programmatic level of analysis, it is not possible to know precisely the location, extent, and particular characteristics of biological resources that would be affected or the precise impacts on those resources. The impacts are therefore considered significant for each alignment alternative and all but 12 of the station location options.” (DPEIR/S at 3.15-65). While it may not be possible to know with absolute precision the impacts of a specific alignment at this stage, the omission of this contextual information (as well as deficiencies in analysis of Section 4(f) and 6(f) issues as discussed below) obscures the true likelihood and differences in magnitude of the impacts to sensitive biological resources posed by each of the alternatives. The document should answer, for each of the alignment options, questions such as:

- o How much potential special status species habitat is present, and of what quality?
- o Are the communities and habitats in small, fragmented patches or part of a larger intact area?
- o Are the existing communities and habitats degraded by urban edge effects or other stressors?
- o Do unique soils exist that may support unique assemblages of plants and animals?
- o Are portions of the HST corridor in protected status or targeted for protection by public agencies or private conservation organizations?
- o What other pending or proposed projects might contribute to a cumulative impact on biological resources?
- o What would be the cumulative impact on biological resources of the project plus development related to the project’s growth-inducing impacts?

Only by characterizing biological resources with respect to these and other issues, rather than merely presenting a list of species and habitats with no context or interpretation, can the impacts to biological resources be meaningfully assessed.

The information used to describe wildlife corridors in the Affected Environment section is taken out of context and does not provide a true description of areas important for wildlife movement and habitat connectivity in the study area. In fact, restricting the focus to “wildlife corridors” rather than assessing habitat connectivity more generally, misses an important biological value that can be significantly degraded by the project. The Missing Linkages report (California Wilderness Coalition 2000, referenced in the DPEIR/S at p. 3.15-16) discusses linkages and corridors *identified by participants* at the conference in 2000. These were high priority corridors and linkages, which themselves have varying levels of existing functionality not discussed by the DPEIR/S. However, that an area was not identified by the Missing Linkages project does not imply that habitat connectivity is not an issue. On the contrary, landscape scale habitat connectivity through an area such as the Diablo Range is relatively secure in comparison to more urbanized areas such as the Altamont Hills, which may explain why it was not identified in the Missing Linkages report. The Missing Linkages report is one source of information, but regardless of what it reported, the HST DPEIR/S must characterize the true biological values and ecosystem functions of land that may be affected by the project. Only with this in mind can the significance of impacts on various different resources and habitats be meaningfully compared. Further, only with such information

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firmly in hand can the feasibility of impact mitigation be accurately evaluated. This was not done adequately for habitat connectivity as well as other habitat functions and values, such as watershed processes, ecosystem integrity, fire regimes, etc.

Fundamental to national wetlands policies is the protection of wetland “functions and values,” not just wetland acreage. Wetlands are listed by Cowardin class in the Affected Environment discussion; however, no characterization of their functions or values is provided.<sup>29</sup> For example, the DPEIR/S provides no information about the relative importance of the different Cowardin class and subclass wetlands that may be affected by the HST system to the overall ecosystem health of the state or region. Nor does the DPEIR/S discuss the availability of replacement wetlands that might be offered as mitigation to replace the impacted wetlands’ function in the regional or statewide context. Without this information, the wetland impact acreages presented in the Environmental Consequences section cannot be meaningfully interpreted, alternatives cannot be meaningfully compared, and the potential and feasibility of adequately mitigating lost functions and values as a result of the project cannot be assessed.

The DPEIR/S does not provide a discussion of the status and regional contributions of conservation areas (i.e., public and private lands protected and managed for natural resources values) in the study area. Substantial investments of public and private funds have been made to acquire and manage lands to protect natural resources, and they support essential regional natural resources functions. The DPEIR/S must assess the potential for the project to degrade and reduce the quality of these areas from a biological resources standpoint. To do this adequately, the DPEIR/S must assess the conservation contributions and regional natural resources functions of these protected areas in the Affected Environment section.

Figures 3.15-1 to 3.15-3 do not adequately characterize the biological resources in the various alignments, and thus, give a false impression as to the magnitudes of their impacts. The figures do not depict the distribution of habitats and rely solely on sensitive species, wetlands, and wildlife corridors to visually depict environmental consequences of the project. At a minimum, figures showing the distribution of vegetation communities, urban, agricultural land, and other infrastructure such as roads should be provided. In addition, it should also be clarified that the special status species information reported was not collected for this project and does not provide a

<sup>29</sup> See, e.g. <http://www.water.ncsu.edu/watersheds/info/wetlands/values.html> for a general discussion of various wetlands values. These include water quality improvement, water supply, flood control, erosion control, fish & wildlife habitat, recreational, cultural, aesthetic, and scientific value, and commercial value. Various protocols for wetlands evaluation exist, including the Wetlands Evaluation Technique (WET), used by FHWA, The Environmental Monitoring Assessment Program—Wetlands, developed by USEPA, and the Hydrogeomorphic Approach developed by the U.S. Army Corps of Engineers. (See, <http://water.usgs.gov/nwsum/WSP2425/functions.html>) While these approaches differ in their emphases, they all provide methodologies for evaluating wetlands. Unfortunately, the DPEIR/S uses none of these approaches and evaluates none of these values for the potentially impacted wetlands. A revised PEIR/S needs to apply and justify an evaluation of wetlands values to wetlands that may be impacted by the various alignment alternatives.

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comprehensive description of special status species distributions across all parts of the study area.

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The Environmental Consequences section of the DPEIR/S is fundamentally flawed in that alternatives are not evaluated at an equal level of detail. For example, the DPEIR/S states in Section 3.1.5.A (p.3-24): "It was not possible as part of this study to identify or quantify impacts on biological resources that would occur as a result of transportation improvements in the No Project Alternative. For existing transportation facilities to be improved, impacts on biological resources have previously been addressed, and only small additional or increased impacts are expected from the future transportation improvements in the No Project Alternative. In some cases, widening of existing corridors or similar improvements could result in additional impacts on biological resources." If impacts of transportation improvements associated with the No Project Alternative have "previously been addressed," then a summary of these impacts should be available for inclusion in the HST DPEIR/S. Furthermore, impacts due to widening existing transportation corridors as part of the No Project Alternative could be assessed in the same way that impacts for HST alignment alternatives were assessed -- by making assumptions regarding direct and indirect impact buffers around the existing transportation corridors. Not presenting information that is readily available not only demonstrates a significant bias in the analysis of impacts, it leads one to wonder what other information may not be adequately disclosed in the EIR/EIS.

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The presentation of potential impacts of the project in the Environmental Consequences section of the DPEIR/S is inadequate and misleading. The analysis of impacts is presented as a list of impact acreages and potentially affected species, without any interpretation of the significance of these impacts. In the case of special status species, the analysis relies on available species data, which does not include areas that have not been surveyed in the past, and thus is a potentially misleading assessment of impact to special status species. The analysis must interpret the numbers and lists presented in the document so that the public and decision-makers can understand the implications of these numbers and lists and be adequately informed. Furthermore, the summary tables presenting biological resources impacts (e.g., Table 3.15-1 and Summary Table S.5-1) only list numbers of special status species potentially affected, wildlife corridors identified by the Missing Linkages Project, linear feet of non-wetland waters, acres of wetlands, and presence/absence of anadromous fish. The failure to indicate, analyze, and discuss the relative values of the different resources makes it impossible for decision makers or the public to accurately gauge the significance of the impacts that would be caused by different alignment alternatives. The acreages and relative values of impact to terrestrial vegetation communities, particularly those considered sensitive by governmental agencies and non-governmental organizations, should also be listed in these or other summary tables. Furthermore, the length of each alignment segment appears to vary substantially, thus the potential for impacts varies considerably. It is virtually impossible from the presentation of biological impacts for a reader to assess the overall magnitude of impacts from major alignment alternatives. The impacts across segments for major alternatives, including an evaluation of values beyond mere raw

acreage involved, should be totaled and presented to provide a comparable assessment of impacts.

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While the acreage of impacts to terrestrial vegetation communities is presented in the text for each alignment segment, there are several problems with this presentation. First, many communities listed as impacted under each segment are not presented under the heading "Sensitive Vegetation Communities" and should be. For example, grasslands are not considered sensitive communities in the DPEIR/S; however, large expanses of grasslands in California are increasingly rare and those that support special status species, such as San Joaquin kit fox, are certainly considered sensitive by the California Resources Agency and the U.S. Fish and Wildlife Service. The southern alignment alternatives (e.g., Pacheco Pass, Henry Miller UPRR, Henry Miller, BNSF, and GEA North) would each adversely affect thousands of acres of grasslands, but this impact is never specifically discussed -- notwithstanding the submittal of detailed information about these resources in the Prior DEIR/S<sup>30</sup> -- except for presenting a single acreage number buried in a long list of other acreages for each alignment segment. Furthermore, the likely direct impacts of construction on these biological resources must be discussed. Construction in areas located in close proximity to existing access roads will have a lesser impact on biological resources than construction in areas where such access roads do not exist and would need to be built to transport the equipment used in construction. While detailed analysis may need to wait for project-level analysis, the programmatic analysis can and must include general consideration of the relative impact of locating Project facilities on an alignment running near or along existing roadways, compared to one without nearby road access.

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The impact analysis does include an indirect impact buffer zone, but it does not acknowledge or provide any discussion of indirect or cumulative impacts that may occur as a result of the project outside of this zone. For example, construction of the HST can be expected to induce residential growth in the vicinity of the alignment. This residential growth is likely to produce impacts to biological resources outside of the assumed indirect impact corridor for the HST project. Furthermore, these growth-inducing impacts would have different magnitudes of effect in different parts of the study area, such as the relatively undeveloped areas along the Pacheco Pass corridor versus the relatively more developed Altamont Pass corridor. Growth-inducing effects on biological resources requires a much more thorough analysis, including consideration of the cumulative impacts from the project plus the growth it induces.

The discussion of impacts to Special Management Areas is completely inadequate. There is no assessment of the nature or magnitude of impacts to these areas. Public parks and other conserved lands serve as the backbone of functional biological open space. These areas are refugia for flora and fauna in the face of ongoing land uses changes that degrade habitat quality. When parks and private conservation areas are part of a larger system of relatively unfragmented open space, they serve as core areas managed for natural resources values within larger landscapes. Thus, indirect impacts, including growth-

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<sup>30</sup> See e.g. Letters on Prior Statewide HST DPEIR/S submitted by the Grasslands Water District and referenced earlier herein.



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inducing impacts, to Special Management Areas can be quite significant and merit special attention. Given the resources that have been invested in these areas and their importance to maintaining regional biological functions in light of ongoing land use and climate changes, impact to these special management areas are potentially very significant impacts that merit much more evaluation and discussion in the DPEIR/S. The comments of the Grasslands Water District and of the California Department of Fish & Game regarding impacts of the proposed Pacheco alignment on the Grasslands Ecological Area are of particular significance. In particular, impacts on the San Joaquin Kit Fox, a federally and California listed endangered species, and its habitat appear highly significant. The PEIR/S needs to be revised to address these impacts and the feasibility of mitigation by way of requiring elevation of the HST right-of-way through this sensitive area. In addition, the issues of wildlife impacts from project-associated noise and vibration need to be addressed more thoroughly.<sup>31</sup>

O007-103  
Cont.

The mitigation measures presented in the Mitigation Strategies and CEQA Significance Conclusions provide no meaningful assurance that impacts from any project alignment would be fully mitigated. The current discussion in the DPEIR/S relies on a formulaic presentation of mitigation considerations but presents no concrete information upon which to base an assessment of whether potential impacts can or will be adequately mitigated. While selection of specific mitigation measures may not be appropriate at this time, at a minimum, an assessment of the availability of adequate mitigation land and the ability to mitigate particular impacts (e.g., landscape scale fragmentation impacts), as well as the ability to adopt clear and enforceable standards must be realistically assessed.

O007-104

A revised analysis of project-related and cumulative impacts to biological resources must be completed as part of a revised and recirculated DPEIR/S and, at a minimum, must include the following:

- Consistency with local natural resources related planning elements and policies for each jurisdiction the alignment traverses;
- Conflicts with NCCP or HCP plans;
- Conflicts with existing protected areas and parklands;
- Quantification of all direct, indirect, and cumulative impacts to natural resources, both permanent and temporary;
- Assessment of adverse impacts to wildlife movement corridors and opportunities to enhance the function of these corridors;
- Assessment of anticipated mitigation measures and permitting requirements, and the probability of successfully mitigating specific impacts;

O007-105

<sup>31</sup> The DPEIR/S seems to assume that noise will not affect wildlife. This is not true. Noise can significantly affect and interfere with normal wildlife behavior. (See, e.g., Quest for quiet - efforts to reduce noise pollution in wilderness areas, by Bill O'Brien, Sierra Magazine, July-August, 1992. See also comments made by Tejon Ranch on the prior programmatic EIR/S for HST Statewide, especially page 3 of pdf at [http://www.cahighspeedrail.ca.gov/eir\\_final/pdf/vol\\_2/ch\\_5/ch-5\\_pg385-392.pdf](http://www.cahighspeedrail.ca.gov/eir_final/pdf/vol_2/ch_5/ch-5_pg385-392.pdf)). This issue needs to be addressed in the PEIR/S, especially in regard to the areas where the Project may go through or near sensitive wildlife areas.

- Assessment of any growth-inducing impacts to natural resources (see Planning/Land Use Study Terms below).
- Characterization with documentation of the significant impacts of the HST alternatives (alignments and stations) on biological resources compared with the existing environment and before and after mitigation.

O007-105  
Cont.

It is simply not appropriate to make choices concerning HST alignments and stations without this information being developed and circulated for public review and comment in a revised EIR/S.

**6. The DPEIR/S Fails to Adequately Analyze Significant Land Use and Planning Impacts**

The DPEIR/S analysis of land use impacts with respect to HST alignments and station choices is inadequate and incomplete. There is insufficient information provided concerning existing and planned land uses in the areas affected by the alternative alignments and stations to support an adequate analysis. Moreover, the section fails to identify impacts associated with the alignments and station choices.

Specifically, such an analysis must include analysis of the following aspects of the project:

- Compatibility with existing and planned land uses;
- Consistency with local plans and policies for each jurisdiction the alignment traverses;
- Consistency with applicable regulations of permitting agencies, where relevant.
- Potential to promote sprawl residential and commercial development in California

O007-106

For the analysis to be meaningful, alternative alignments and stations should be overlaid on layers of aerial photos indicating all of the following:

- Current parcels and parcel size under common ownership;
- Current land uses;
- Current General Planning;
- Current Zoning;
- Key land use and environmental constraints (e.g. wetlands, agricultural lands, geologic hazards, etc.)

In contrast, the DPEIR/S specifically states, “Because this analysis was conducted at the county level, it does not explicitly reflect potential land designation or policy constraints that are included in each jurisdiction’s general plan.” (Id. at p. 5-7, footnote 5).

Because the DPEIR/S fails to present this necessary information, the conclusions it reaches concerning land use impacts are simply unsupported. The DPEIR/S fails to analyze and disclose the project’s (including all alternatives’) impact to the physical



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environment and its corresponding effect on land uses as required under CEQA and NEPA for a number of reasons, including its lack of adequate and complete setting information and study areas, its lack of information about existing and planned land uses and policies, and its inadequate analysis of impacts and failure to identify feasible mitigation measures.

0007-106  
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Unlike the other sections of the DPEIR/S, the land use analysis only looked at one Network Alternative for each alignment choice. Having identified a wide range of network alternatives for each alignment choice, the PEIR/S needed to either evaluate the relative land use impacts of the various options or explain why some options had been eliminated from consideration. The DPEIR/S seems to assume that any one network alternative will adequately exemplify the land use impacts of other alternatives for that general alignment choice. It fails, however, to present any evidence to support this assumption. If the PEIR is to rely on only one network alternative for each alignment option, it needs to provide substantial evidence to support the implied claim that the chosen network alternative's land use impacts are representative of the other network alternatives that were not examined.

0007-107

First, omitted and inadequate project description information makes it impossible to adequately evaluate Project-related impacts on land use. Examples of omitted or inadequate project description elements that result in an underestimation of land use impacts include, but are not limited to the extent of new and expanded infrastructure and public services needed for HST, general plan and zoning amendments that will be needed for the alignments, stations and related facilities and the like. Absent a description of the whole project, land use impacts cannot be fully disclosed or analyzed.

0007-108

Second, the description of the affected environment discussion in the Land Use Section has numerous omissions and inconsistencies that make the section inadequate for choosing a preferred modal alternative, let alone HST alignment and station alternatives. For example, the DPEIR/S suggests that general plans were considered using an economic and growth inducement model prepared by Cambridge Systematics, Inc. However, the land use section provides no evidence that general plans, zoning, and existing land uses were actually considered<sup>32</sup>. Moreover, the affected environment discussion does not provide an adequate description of the setting for areas affected by the project alternatives. The study area for land use is inadequate. These limited study areas result in a gross underestimation of the land use compatibility impacts that could occur as the result of these projects being constructed. The study areas must be expanded to address the true effects of a train going by at 200 miles per hour and the growth-inducing impacts of the HST that may completely alter existing neighborhoods and areas well beyond them. Revised analyses of project-related and cumulative land use impacts must be completed based on a complete description of the project and project setting.

0007-109

The DPEIR/S fails to identify feasible mitigation measures for significant land use impacts. Mitigation "strategies" proposed for land use impacts are vague and deferred.

0007-110

<sup>32</sup> Indeed, as already noted, the DPEIR/S appears to indicate that local land use plans and their associated policies were not considered in the DPEIR/S's land use analysis.

While identification of detailed mitigation measures may not always be feasible at a programmatic level, it is certainly possible, and indeed necessary, to consider and discuss the feasibility of various alternative mitigation strategies, and it is not only feasible but necessary for the PEIR/S to commit to achieving defined and demonstrably achievable standards in order for it to conclude that adequate mitigation will occur. The DPEIR/S' approach to mitigation is simply inadequate for either modal alternative selection or more detailed alignment and station location selection for HST. Feasible mitigation measures must be identified and, in the case of more detailed decisions concerning HST alignments and stations, additional details concerning these project descriptions must be provided. It is not appropriate to make an alignment choice based on the possibility that significant impacts to land use and environmental justice "might" be avoided by as yet undetermined mitigation measures.

For example, with respect to land use impacts, the DPEIR/S should have specified mitigation requirements for land use and growth-inducing impacts including:

- "Requirements" for agreements with cities/counties the route traverses for "smart growth" policies (e.g. in downtowns around stations specific programming for higher densities, reduction or elimination of minimum parking requirements, market-based parking pricing policies, etc.; in rural areas specific policies for farmland protection, etc.). If "smart growth" policies are not in place prior to HST being constructed, the sprawl inducing impacts should be assumed to be significant;
- Limitations on the amount of station parking provided, along with pricing and other policies to encourage users of commuter rail services (i.e., station area residents) to use public transit or non-motorized means for station access and discourage the use of HST stations as "park and ride" lots to service sprawl development projects on converted agricultural lands;
- Up-front purchase of conservation and agricultural easements to either side of the tracks;
- Fees (such as an ongoing portion of ticket revenues) for additional purchase and stewardship of conservation, recreational and agricultural lands; and
- Permanent restrictions on the addition of future stations, or, in the alternative, analysis of each potential future station's growth-inducing impact and identification of mitigation measures to address that impact.<sup>33</sup>

0007-110  
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In addition to identifying feasible alignments and restricting station locations to existing urbanized areas to minimize conversion of agricultural and habitat lands to urban uses, these measures, put into place early, would further improve the chances that HST would result in beneficial impacts.

<sup>33</sup> For example, there is currently no station proposed on DMB Associates' approximately 20,000 +/- acre holding between Gilroy and Los Banos. A station located on this currently undeveloped land could be tremendously growth-inducing. Similarly, if a station is located in Los Banos in the future, growth-inducing impacts on habitat and agricultural lands would be significant. Unless the PEIR/S can identify a means of assuring that such stations will not be built, the assumption must be that they will eventually be added, and their growth-inducing impacts must therefore be assessed in the PEIR/S and appropriate mitigation measures proposed.



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Last, it is not clear from the DPEIR/S what the significant land use impacts are before and after mitigation. A revised and recirculated EIR/S must include clear statements of significance and demonstrate how mitigation measures will in fact reduce potentially significant impacts to less than significant.

0007-111

7. The DPEIR/S Fails to Adequately Analyze the Growth-inducing Potential of the Alternatives.

The DPEIR/S fails to provide any meaningful analysis of the growth-inducing potential of the proposed HST alternative alignments and stations. Based on inadequate and contradictory information, the DPEIR/S concludes that the growth potential with HST is "potentially beneficial" with mitigation strategies. Indeed, there is already a considerable amount of existing literature documenting the potential land use impacts of HST service on growth rates and distribution of growth. This literature is not even mentioned. This and other conclusions reached in the DPEIR/S are not supported by adequate and transparent analysis or substantial evidence.

CEQA requires that an EIR contain an analysis of a project's growth-inducing impacts. Growth-inducing impacts are those that encourage or facilitate other activities or projects that could significantly affect the environment. The "detailed statement" setting forth the growth-inducing aspects of a project must "[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." CEQA Guidelines Section 15126.2(d). It must also discuss how a project may "encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively" or remove obstacles to population growth. Population growth in turn may impose new burdens on existing or planned community services. Similarly, NEPA requires that agencies consider the indirect effects of a proposed action, such as growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate. 40 CFR 1508(b). While the CEQA Guidelines note that additional growth should not be assumed to be either detrimental or beneficial, significant impacts related to growth induced by a project must be identified and, if adverse, mitigation proposed.

0007-112

The general analysis of growth inducement that is included in the DPEIR/S fails to accurately analyze and document the likely growth that could be induced and erroneously concludes that growth induced by HST will be beneficial after mitigation strategies are imposed. Lead agencies must not assume growth induced in an area is beneficial or of little consequence until it has completed a comprehensive and objective analysis. CEQA Guidelines section 15126.2, subd.(d). Here the DPEIR/S conclusions concerning growth inducement are not supported by substantial evidence (e.g. that the Altamont Alternative will result in the consumption of more land through growth-inducement than Pacheco). The exercise of analyzing growth inducement is technically feasible and must be included in a revised DPEIR/S. Major flaws in the DPEIR/S approach to growth inducement include but are not limited to the following:

First, while the DPEIR/S states that professional experience was used in determining growth impacts (DPEIR/S at 5-4), it is clear that the professionals did not evaluate aerial photos and property ownership maps along the two alignments. This information is missing from the list of information and key steps taken to estimate the growth-inducing effects of the alternatives. See DPEIR/S at 5-6. Had the consultant team taken this basic step, the analysis would be far superior to the "modeling" outputs presented. Specifically, there are numerous consolidated large land holdings of vacant/undeveloped agricultural and open space lands along the Pacheco route between San Jose and Merced.

Reference to the history in California of similar situations (e.g., development of the San Fernando Valley in the 1940s and 50s, development of Central Contra Costa County in the 1970s and 1980s) indicates that introduction of HST into low density areas dominated by large and speculative real estate holdings can be predicted to induce the type of growth destined to increase sprawl and therefore worsen California's air quality and global warming condition. Yet, the DPEIR/S fails to identify this likely scenario, and instead suggests that somehow history will not repeat itself and that areas along the Pacheco route will either develop as dense urban areas or stay undeveloped. Again, the history of California development strongly indicates that the only way that sprawl will be prevented in whatever areas are opened up to development by HST service is by requiring implementation of strong land use regulatory controls.

0007-113

Such controls, including mandatory urban growth boundaries, mandatory high density mixed use areas surrounding each HST station, and mandatory development of a complementary local public transit system need to be made prerequisites for the building and opening of HST stations or, where stations already exist, making that station a stop on the HST line. In addition, the CHSRA needs to commit itself to not opening stations except where there is already an existing significant population center. Otherwise, it must be assumed that the HST service will induce conventional suburban growth in station vicinities, with predictably associated traffic, air quality, water quality, and other adverse impacts, all of which would need to be studied in the PEIR/S.

Moreover, the DPEIR/S fails to provide any analysis of the growth-inducing potential of the proposed alternatives and in particular of the HST alignment and rail stations in specific areas where stations will be located. Without a station-by-station analysis, it is not possible to evaluate which combinations of stations along a potential alignment would be environmentally superior. Furthermore some mitigation measures for growth inducement and other impacts will likely be specific to individual stations. Therefore, mitigation measures cannot be properly evaluated if individual station impacts are left unanalyzed. Both of these points are shown by the discussion of the Modesto station location on page 5-30 of the DPEIR/S:

0007-114

"In Stanislaus County, the Amtrak Briggsmore station could lead to the urbanization of 1,000 more acres in the county than the SP Downtown station site 9, leading to additional indirect impacts; this difference between station sites accounts for about 35% of the difference in



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urbanized area size between the Altamont and Pacheco network alternatives noted in Table 5.3-6 for Stanislaus County.”

A large impact that significantly affects the Altamont HST alternative could be mitigated by selecting the environmentally superior station in Modesto. The DPEIR/S does not disclose this in Table 5.3-6 or anywhere else in the document, leaving the reader to figure out how to plug the 35% into the numbers in Table 5.3-6 and attempt to recreate the calculations needed to understand how this would affect the overall comparison of HST alternatives. For other station locations, the reader is not given any quantification of how various station locations, or their addition or removal, would affect the different alternatives.

While the DPEIR/S fails to analyze growth-inducing impacts of specific alignments and station locations, it does provide general information concerning potential economic and housing growth inducement by region. Notwithstanding the overwhelming empirical evidence that applying this approach to remote areas like those that the Pacheco and Diablo alignments would traverse, would exert tremendous pressure for growth induction, the DPEIR/S concludes that:

“Overall, the system alternatives exhibit very similar levels of growth-inducing effects in terms of population, employment, and urbanization patterns.”

This conclusion is simply not supported by the evidence in the DPEIR/S. To the contrary, elsewhere in California, recent growth patterns demonstrate that accessibility to major employment centers has triggered tremendous new growth.<sup>34</sup> The introduction of HST to the rural and undeveloped areas along the Pacheco routes will make it possible for Bay Area employees to easily commute to and from affordable suburban and rural housing in and around the Grasslands area and create significant pressure for growth of housing and new services in this area. Additional growth in the rural areas poses significant indirect threats as a result of increased population and pressure on farmlands, wildlife habitat, and open space. The applicable county general plans for these rural areas currently call for a predominance of low density and rural residential uses. The relative affordability of homes and property in these areas as compared with the Bay Area will be a tremendous draw for Bay Area workers to move to the area as they did during the “dot com” boom of the late 1990’s, when workers moved to areas such as Salinas and Vacaville/Fairfield that were outside of the Bay Area’s traditional suburban areas and where housing was much more affordable than in the central Bay Area. A revised DPEIR/S must disclose and analyze the likely growth-inducing impact of HST on such rural areas, including how introduction of a HST station is likely to accelerate growth and

<sup>34</sup> Examples include the Auburn corridor, as major new employers moved to the Sacramento region and north, and the Truckee area, which is approximately 1 hour from the major new job growth in the Auburn Corridor and Reno. Historical growth patterns in California clearly demonstrate that the close proximity of a major job center inevitably leads to growth inducement for housing within commute range. HST will render the Grasslands area within close commute range to major job centers in the Bay Area. While the DPEIR/S should review relevant studies on growth inducement related to major transportation infrastructure, please see Exhibit F for a Land Use and Economics Study of the Grasslands Ecological Area.

O007-114  
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O007-115

increase demand for subdivisions and development. Land conversion estimates should be developed for each rural area served by HST, as well as analysis and discussion of the significance of likely impacts on farmland, wildlife habitat, ecosystems, and open space.<sup>35</sup>

The methodology behind the projections in Table 5.3-5 and all subsequent tables is unexplained and the results are suspect. Alameda County, with additional stations under the Altamont alternative, is projected to have less employment under this alternative than under the Pacheco alignment. Contra Costa County is also projected to have less employment and population under the Altamont alignment alternative, despite having better access to HST stations under this alternative. San Francisco would have reduced travel times to both Southern California and the Central Valley under the Altamont alternative, at the cost of reduced access to Gilroy and Morgan Hill, yet again the DPEIR/S indicates that it would have more employment and population growth under the Pacheco alternative. Is access to southern Santa Clara County more important to San Francisco's growth than access to the rest of the HSR network combined? That is what the model results appear to state; and is not believable. Conversely, Santa Clara County's population is shown as growing faster under the Altamont alternative than under the Pacheco alternative. Thus, Table 5.3-5 indicates that shifting HSR access from southern Santa Clara County to Altamont would increase growth rates for the county. Again, the result is counterintuitive, and, at the very least, requires explanation. These results indicating that removing stations from Alameda or Santa Clara Counties increases employment or residential growth while adding more stations reduces growth do not make sense. They strongly suggest that the models used are fatally flawed, or that the two models used different data sets and/or assumptions, making comparisons between the models invalid.

Since results were not broken down by station and a list of which stations were included in each alternative is not provided, it is impossible to verify how the county level numbers were arrived at. Further, since the methodology behind the model is not disclosed in the DPEIR/S, the accuracy of its assumptions cannot be verified. Because the model projections in Table 5-3.5 are the basis for all other tables and discussions on the relative growth-inducing and economic impacts of the two alternatives, all the projection numbers used to determine impacts are suspect. The entire analysis needs to be

<sup>35</sup> In the statewide HST PEIR/S, similar comments were raised. The response in the Final EIR/S was to argue that the cumulative commute time would make long distance commutes from the Central Valley to the Bay Area infeasible. However, this response overlooks several salient points: 1) Especially if the Pacheco alignment is chosen, points in the Los Banos to Merced portion of the alignment will easily be within an hour’s ride of San Jose. 2) Further, San Jose development has tended to sprawl southward, and there are numerous proposals for major commercial development in the Coyote Valley south of San Jose. This area would be even closer and more susceptible to growth-inducing impacts, both as a residential “feeder” for San Jose and as a commercial center receiving commuters from the Central Valley, if HST service is introduced on the Pacheco alignment. The DPEIR/S needs to evaluate both these highly foreseeable outcomes and their effects on the Pacheco alignment’s growth-inducing impacts. 3) Commute times in the Bay Area have continued to increase along with traffic congestion and the expansion of the commute areas to affordable housing. Four hour per day commutes are no longer considered unthinkable. Expected Central Valley to Bay Area commute times need to be compared to actual commute times of current Bay Area commuters to determine what level of commute time is considered acceptable.

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O007-117



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redone and republished, based on a model that is accurate and whose methodology, assumptions, and supporting data are disclosed and explained.

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Cont.

Second, as with the other impact sections, it is clear that the section “analyzes” some growth impacts, such as employment only in relationship to future conditions. See Table 5.3-5 and 5.3-6. This approach results in an underestimation of the growth that will be induced by the introduction of HST, particularly into undeveloped areas underserved by roads and transit.

O007-118

Third, the DPEIR/S concludes that HST will lead to more efficient use of the land and higher densities. These conclusions are simply not supported by the general plans or by the evidence presented in the DPEIR/S. Incredibly, the DPEIR/S concludes that the HST Alternative will result in significantly improved land use efficiencies over the No Project Alternative:

“The results indicate that the Pacheco network alternative is the most efficient of the alternatives, providing an incremental development density that is 1.3% more efficient than the No Project Alternative, while the Altamont network alternative is 0.8% more efficient than the No Project Alternative.” DPEIR/S at 5-17.

O007-119

However, the DPEIR/S provides no data, evidence, or research citations to support this conclusion. While, after decades of research on the growth impacts of high speed rail, studies have shown that HSR service concentrates commercial growth around stations<sup>36</sup>, other studies have shown that HSR is correlated to higher overall growth rates<sup>37</sup> along with the dispersion of residential populations and induced long-distance commuting<sup>38</sup>. It is impossible to verify the basis of the DPEIR/S conclusion when no evidence or even citation to supporting studies or data is presented. Further, the DPEIR/S provides no evidence to support its claim that development induced along the Pacheco route would be more compact or energy efficient than that along the Altamont route. Even if the open space development induced by the Pacheco route were denser than infill Altamont development<sup>39</sup>, one has to look at where that development would be. Altamont infill

<sup>36</sup> Sands, Brian D. The Development Effects of High-Speed Rail Stations and Implications for California. Berkeley, CA: Institute of Urban and Regional Development University of California at Berkeley, 1993.

<sup>37</sup> Rietveld, P., F.R. Bruinsma, H.T. van Delft, and B. Ubbels. Economic Impacts of High Speed Trains. Experiences in Japan and France: Expectations in the Netherlands. Amsterdam: Vrije Universiteit Amsterdam, 2001.

<sup>38</sup> Haynes, Kingsley E. “Labor Markets and Regional Transportation Improvements: The Case of High-Speed Trains an Introduction and Review.” Annals of Regional Science 31, no. 1 (1997): 19.

<sup>39</sup> Rietveld, P., F.R. Bruinsma, H.T. van Delft, and B. Ubbels. Economic Impacts of High Speed Trains. Experiences in Japan and France: Expectations in the Netherlands. Amsterdam: Vrije Universiteit Amsterdam, 2001.

<sup>39</sup> This seems a highly questionable assumption. Certainly there appears, based on examination of city and county general plans, significantly more awareness of the need for compact growth and clustered development in the general plans of, for example, Livermore, Pleasanton, Dublin and Alameda County [all of these jurisdictions have adopted urban limit lines or otherwise expressed a preference for infill, clustered

development in the middle of Livermore or Tracy, even if it were, theoretically, to be less clustered than in the open spaces near Los Banos, would still contribute less in new sprawl and therefore less in energy consumption, less in air pollution and less in global warming than the type of development that would occur if Pacheco is selected. In any case, the DPEIR/S’s assumptions and conclusions are unsubstantiated. What is needed is a direct comparison, both at the general plan level and in terms of the on-the-ground built environment, of the efficiency of development policies and practices in the areas along the two alternative alignments, including a breakdown of the data for the different station location options. This analysis needs to be included in the revised DPEIR/S.

The DPEIR/S’s claimed result appears to be tied in major part to the assumption that: “Much of the potential incremental growth associated with each alternative is likely to focus around HST stations...”. DPEIR/S at 5-18. While the document cites to “[r]ecent trends among local jurisdictions” showing a growing consideration of land use policies that are intended to encourage high-density, mixed-use development in downtowns, no information on plans for station locations or alignments is provided to support this claimed trend. DPEIR/S at 5-20. Further, policies promoting high-density mixed-use development around rail stations, as opposed to the more typical suburban sprawl, do not materialize out of nowhere. Absent regulatory intervention, new development in an area would be constrained to follow the existing low-density and auto dependent zoning, leading to continuation of the same growth patterns as those of existing development. Areas where sprawl is endemic and allowed, encouraged or required by the current zoning and related land use regulations tend to produce more sprawl; while areas where high-density compact development predominates because it is allowed, encouraged, or required by the current zoning and land use regulations, tend to produce more of the same. The PEIR/S’ analysis of induced growth needs to apply this principle in assessing the impacts on, and in designing mitigation for, the areas where HST may induce additional development.

O007-119  
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The type of result posited in the DPEIR/S is not likely to occur in areas planned and zoned for very low densities, such as those along the Pacheco route. The DPEIR/S, in Table 5.3-7 on Page 5-17, shows Pacheco as using land more intensively than Altamont. However, this supposed fact is due primarily to errors in using the statistical data involved. The chart was produced by taking total land consumption forecasts and dividing by total population and employment increases. In short, it is only a broad average figure across a large area. More precise and focused figures are needed before conclusions about relative development density can be taken seriously. The DPEIR/S also does not explain where these various figures come from and how they were derived. Thus, for example, does “land consumption” mean agricultural land taken out of production for any reason? Does it include land taken out of production for park dedication? If so, the figures are deceptive, because land placed in parks is NOT being developed and should not be considered in determining land use efficiency. Without much more information on the meaning of the figures and how they were derived, the table is effectively meaningless. In any event, the impingement of growth induction in

development, and smart growth). By comparison, jurisdictions along the Pacheco route have shown little recognition of the need to promote compact, infill “smart growth”, rather than sprawl development.



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the remote areas that would become accessible if the Pacheco route were adopted would undoubtedly result in more sprawl than would occur along the already built-up Altamont route.

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The DPEIR/S fails altogether to analyze the HST’s role in inducing low-density suburban and rural residential development. This is among the document’s major flaws. The DPEIR/S ignores the “ranchette phenomenon,” which is one of the highest impact types of sprawl.<sup>40</sup> Census figures make it possible to separate rural and urban populations. The DPEIR/S simply fails to consider the high demand for this type of sprawl development and therefore fails to identify and analyze the additional significant impacts related to that growth (assuming mitigation in the form of growth-control policies is not implemented) including increased traffic, increased pollution, increased demand for services and infrastructure, accelerated and increased loss of open space, agricultural and habitat land. New transportation facilities are classic for inducing and accelerating growth, particularly in rural and undeveloped areas. Examples abound, including the “streetcar suburbs” of Eastern U.S. cities and the growth in the East Bay associated with the expansion of the “Key” streetcar system.<sup>41</sup> A revised DPEIR/S must analyze likely new and accelerated growth based on existing general plans and the likelihood that HST will prompt general plan and zoning amendments for additional growth and accelerate both urban and rural development.

O007-120

Without any analysis of facts the DPEIR/S concludes that HST will minimize a variety of impacts normally associated with growth due to its inherent incentives for directing urban growth:

“In short, either HST Alternative provides a strong incentive for directing urban growth and minimizing a variety of impacts that are frequently associated with growth. This outcome would be seen in results for resource topics such as farmland, hydrology, and wetlands, where the indirect effects of the HST Alternative are less than the No Project Alternative, even with more population and employment expected with the HST Alternative.” DPEIR/S at 5-32

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This conclusion is utterly unsupported by any factual evidence or citation to supporting literature. In fact, the history of past expansions of transportation infrastructure is rife with evidence that unless mechanisms are put in place to control how growth occurs, rampant sprawl is likely to result. One need look no further than the expansion of the BART system into the East Bay, with the associated construction of large park-and-ride

<sup>40</sup> The analysis completed by the American Farmland Trust (see comment letter submitted by AFT on the Prior DEIR/S), suggests that between 300,000 and 700,00 additional acres of land could be converted to rural ranchettes based on population projections, current ranchette development trends and assuming an average of 5 acres per dwelling and 2.8 persons per household. This trend will accelerate the subdivision of open space lands for ranchette development where HST removes the barrier of accessibility to jobs.

<sup>41</sup> Even these past examples of growth underestimate the degree of sprawl induction that could result from HST station placement. Those previous examples occurred at times when cars were far less prevalent and roadways far less extensive and well-developed. In those days, most people walked to the trolley stop. With HST service, most people can be expected to drive to/from the HST station unless strong incentives and disincentives are combined to counteract the modern tendency to drive.

lots, to see where expanded rail infrastructure has promoted sprawl development in places such as Pittsburg and Antioch. Conversely, the more recent transition of some of these areas (e.g., Fruitvale and del Norte stations) to more compact “smart growth” development has required the active intervention of the local jurisdiction’s planning policies. If the DPEIR/S proposes to claim that addition of HST will, in itself, induce compact urban growth, it must support this claim with evidence based on past situations where, under comparable circumstances, construction of HST, or at least rail infrastructure, has promoted dense, focused urban development, as opposed to suburban sprawl. Further, these situations would need to involve comparable situations, planning policies, and cultural norms to those that exist along the proposed HST alignments<sup>42</sup>. Comparison with HST construction in Europe or Japan is not possible without taking into account the cultural differences, local and regional environmental, development, and land use policies in place at the time HST was implemented, and other relevant differences from the current situation in Northern California.

O007-121  
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Fourth, the DPEIR/S fails to disclose the likely increase in demand in areas served by HST for second homes. For example, the Sierra Foothills along the Central Valley will become very accessible to the major population of L.A, Sacramento and the Bay Area. The spectacular open space setting in the Sierras already make them highly attractive as a second home market. With HST bringing these areas within an hour of major population centers, the likely increase in second home demand is likely to be significant. The DPEIR/S is silent on this potential growth-inducing impact and its secondary impacts. A revised DPEIR/S must include analysis of this potentially significant impact on rural areas proposed to be served by HST.

O007-122

Fifth, stations proposed for rural areas are likely to require major new infrastructure and services. The DPEIR/S fails to reveal the extent of these facilities nor does it analyze the growth-inducing impact these new facilities will have in the immediate areas surrounding the stations. A revised analysis must include information about the types of services and infrastructure needed for these stations and analyze how the extension of those facilities will remove an existing barrier to growth in these formerly unserved and relatively remote areas. Specifically, the DPEIR/S should describe the current general plan and zoning of each proposed station site and surrounding areas; the existing status of services and infrastructure; services and infrastructure that will be provided to serve each new station; and the likely growth-inducing effect of the station and those facilities on adjacent lands.

O007-123

Sixth, the DPEIR/S discussion of economic and growth inducement suggests that the introduction of HST to the Central Valley will change the types of jobs in the region and lead to personal income growth. Yet, the DPEIR/S fails to analyze the likely results of this dramatic change, including, but not limited to increased demand for larger, high-end homes, increased demand for services and overall increased growth and development to serve the very different demands of higher income individuals and families.

O007-124

<sup>42</sup> E.g., it is clear that many parts of California have cultures acclimated to extensive private auto use, as opposed to long-established urban areas such as New York, Boston, Chicago, or many parts of Europe and Japan, where public transit use is the norm.



**Comment Letter 0007 - Continued**

Seventh, the assertion in Section 5.5.16 that there are no growth-induced impacts on 4(f) and 6(f) resources is utterly unsubstantiated, and must be deleted. The indirect impacts of developing a Pacheco HST Alignment were identified in comments from the U.S. Fish and Wildlife Service, amongst others. See below.

0007-125

Eighth, the growth inducement analysis entirely ignored Monterey and San Benito counties. These counties cannot be found on any of the tables accompanying the growth inducement analysis, despite their proximity to one of the alignment alternatives. The AMBAG counties are projected to have a 75% increase in population between 2000 and 2030 (Table 3.2, Bay Area/California High-Speed Ridership and Revenue Forecasting Study, Draft Final Report; CAHSR, 2007). An increase of that magnitude needs to be explained, especially as to whether the potential for HST played a role in enlarging that projection. The growth inducement analysis needs to be redone, with attention paid specifically to these neighboring counties of the Pacheco alignment.

0007-126

Ninth, the land use efficiencies for the two alternatives differ only in the third decimal place. (Table 5.3-7) Nothing in the growth inducement analysis identified the margin of error for the econometric model, or whether this difference lies outside it. There was no statement that the difference is significant.

0007-127

Finally, the mitigation “strategies” proposed for dealing with growth-induced impacts are not sufficient. While increased development density around HST stations in downtown locations has the potential to avoid or minimize some impacts, the opposite is likely to be the case where stations are located in rural areas. The Cambridge Systematics study suggests that regulatory efforts to encourage increased density of land uses near rail stations have been effective. DPEIR/S at 5-32. The inclusion of Section 6, HST Station Area Development, in the DPEIR/S is of interest in this regard. However, the DPEIR/S proposes no mechanism to ensure that such principles will be applied in the placement of HST stations. If the policies proposed on page 5-32 are to be effective in mitigating growth-inducing impacts, they must be mandatory prerequisites for the location of any station. Again, the document fails to analyze the gap between these principles and the existing general plans for the proposed stations along each route. Such an analysis would likely favor the Altamont route as having stations in locations where the local jurisdiction has enacted “smarter” planning and zoning. Such an analysis must be included in a revised DPEIR/S.

0007-128

Specific mitigation measures, such as urban growth boundaries, transit-oriented development district planning and zoning, housing density and affordability requirements, incentives to reduce auto ownership and use, and the like, directed at avoiding sprawl, must be in place prior to HST station development if adverse impacts associated with growth inducement are to be avoided or minimized. Such measures include:

- o Requirements for agreements with cities/counties the route traverses for “smart growth” policies (e.g. in downtowns around stations specific programming for higher densities, etc.; in rural areas specific policies for

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farmland protection, etc.)<sup>43</sup>. One mechanism to pursue these agreements might be allocating funding in return for smart growth provisions in General Plans and zoning; and

- o Conditioning the actual construction and opening of HSR stations upon the local jurisdictions’ adoption of “smart growth” policies encouraging locating transit-focused development in the station vicinity and discouraging the proposal or approval of sprawl development.
- o Up-front purchase of conservation and agricultural easements to either side of the tracks and stations where located in undeveloped areas outside of cities.
- o Urban growth boundaries;
- o Limits on subdivisions outside of urban growth boundaries and the like.

0007-128  
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Other questions concerning the DPEIR/S section on Economic Growth and Related Impacts include, but are not limited to the following:

- o The section states that “in order to better simulate the population and employment growth effects for each system alternative,” they were kept as separate economic modeling regions. DPEIR/S at 5-3. If this was the approach, rather than using a single interactive model, how was it possible to model the growth-inducing effects of the different alignments on the two regions together? Was any model available that could verify the outputs of the separate models? If so, was it utilized for such a validation exercise? If not, how can the results be validated?

0007-129

It is a basic axiom of modeling systems that modeling results need to be validated against real world data to confirm the validity of the model before the results can be used with any confidence. The DPEIR/S needs to indicate that such validation occurred and provide evidence of the degree of confidence that can be placed in the model used, based on the results of the validation test.

- o According to the DPEIR/S, the land consumption for both HST Network Alternatives is projected to be about the same magnitude because of the predominant effect of population growth. DPEIR/S at 5-13. In the 11 core area counties, the Altamont network is projected to consume an additional 5,000 acres of land for urbanized densities compared to the Pacheco network alternative. This outcome is counter-intuitive. On the preceding page, the statement is made that a reduction in the availability of land for development in some Bay Area counties creates market forces for higher density and slight increases in infill and redevelopment potential. Real estate and transportation experts should be retained to validate this modeling result based on existing development along the

0007-130

<sup>43</sup> Studies on whether introduction of transit stations result in higher density, so called “smart growth” development, have shown that these benefits are not automatic. Rather, land use and zoning changes must be put in place in order to achieve these outcomes. The Metropolitan Transportation Commission has launched a study to better ascertain the relationship of transit stations, land use and ridership. A revised PEIR/S should consider this and other studies when formulating effective mitigation measures to ensure a beneficial land use outcome from the placement of HST stations.

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**Comment Letter O007 - Continued**

two alignments using basic tools including aerial photographs, parcel and property ownership data, etc.

O007-130  
Cont.

- O007-131
  - o The undefined “expected densification trends over time” on page 5-7 are strongly undercut by Footnote 5, which discloses the expectation that future land use will be mostly like present land use. “The densities that are allowed under zoning and general plan designations are implicitly included in the analysis to the extent that existing development patterns and market forces have been influenced by past zoning and general plan decisions.” For the most part, in the areas involved, this is not going to be Smart Growth. The footnote indicates the lack of evidence for later findings that expect future densification.
  - O007-132
    - o It makes no sense that the Altamont alignment would cause more population growth in Santa Clara County than the Pacheco alignment (Table 5.3-1). Common sense dictates that that result would be reversed (especially considering that the modeling assumed Pacheco would provide higher levels of service). This counterintuitive result casts doubt on the entire modeling exercise. It requires further explanation.

Even with these measures identified in a revised DPEIR/S, additional evidence must be provided that they would actually have the desired effects in rural areas. Revised analyses of these likely significant and adverse growth-inducing impacts of HST must be completed.

O007-133

**8. The DPEIR/S Fails to Analyze Adequately Section 4(f) and 6(f) Issues and Impacts.**

The discussion of the issue of parks, open space, wildlife refuges and otherwise “protected” areas in the DPEIR/S, is inadequate for numerous reasons including lack of adequate information about the proposed project alternatives, lack of setting information, inadequate impacts analysis and failure to identify feasible mitigation measures.

The DPEIR/S begins with the following disclosure:

O007-134

“At this stage, it is not practical to study or measure the severity of each potential impact identified. No fieldwork was conducted as part of this analysis. In subsequent project-level analysis, Section 4(f) and 6(f) resources, potential uses and impacts, and appropriate mitigation measures would be evaluated in detail and determinations made.” DPEIR/S at 3.16-2.

This approach to such a critical topic is simply indefensible. Alignment and station choices will be made following the release of the FPEIR/S. These are crucial decisions in terms of the potential Section 4(f) and 6(f) resources. Additional study at a later date will not undo the damage done by premature and ill-informed choices. Additional information, analysis and mitigation for HST alignment impacts to Section 4(f) and 6(f) resources must be included in a revised EIR/S at this level before such choices are made.

Other flaws in the document’s treatment of this topic include, but are not limited to the following: The DPEIR/S fails to adequately characterize the project setting with respect to Section 4(f) and 6(f) resources. In enacting Section 4(f) as part of the Department of Transportation Act of 1996, Congress declared that “special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands.” 49 U.S.C. Section 303. As a means of implementing these goals, Congress specified two fundamental mandates: 1) prohibiting federal agencies from approving transportation projects that require use of a public park or recreation area unless there is no feasible and prudent alternative to using the parkland; and 2) requiring transportation projects which use a public park or recreation area to include all possible planning to minimize harm to the parkland. U.S.C. Section 303c. Authoritative interpretation of federal agencies’ duties under this provision was established and continues to be provided by the 1971 Supreme Court decision in Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402. In that case, the Supreme Court overturned the Secretary of Transportation’s approval of a six-lane highway through a park in Memphis. In reaching its decision, the court held that “only the most unusual situations are exempted” from the Section 4(f) mandate. The court further clarified that such situations would include only “unique problems” such as extreme financial costs or community disruption of “extraordinary magnitudes.” Id. at 411, 413.

O007-135

Based on this and other cases, it is clear that choosing an alignment or station alternative that requires use of a public park or recreation area simply because it is the least expensive or most efficient choice does not meet the mandate of Section 4(f). In the case of HST, there appear to be feasible alternatives that avoid impacting public parks, recreation areas, nature preserves, and refuges. Our summary of flaws in the DPEIR/S analysis of these impacts is as follows<sup>44</sup>:

O007-136

The DPEIR/S lists the significant Section 4(f) and 6(f) resources in each region. DPEIR/S at 3.16-4.<sup>45</sup> However, it is important that the reader have an understanding of the locations of these valuable resources in relation to the alignments under consideration. The PEIR/S needs to include a map identifying and showing the locations of all Section 4(f) and 6(f) resources, and specifically all state parks, in relation to the alternative alignments under consideration in the PEIR/S.

O007-137

First, the DPEIR/S defers meaningful analysis of impacts to these resources. The DPEIR/S contains a table, Table 3.16-3 and text which briefly summarize general direct and indirect impacts to these resources. The table and text suggest there will be numerous significant direct and indirect impacts to these resources depending on alignment, station and network, but provide information that is so vague as to be of little analytical use. Without a more specific impact analysis, it is impossible to know what

<sup>44</sup> See also letters submitted by the California State Parks Foundation, Defense of Place and the Natural Resources Defense Council.

<sup>45</sup> It should be noted that the State Department of Parks and Recreation, in a letter dated 10/28/05, identified nine state parks in the Bay Area/Central Valley area that could potentially be affected by the HST project but were not referenced in the Statewide PEIR. This PEIR should comment on the completeness of its listing of Section 4(f) and 6(f) resources compared to the list in that letter.



**Comment Letter 0007 - Continued**

impacts will result from different possible alignments and to what extent mitigation measures would reduce or eliminate those impacts. Under the requirements of federal law, and because protected areas are such a high priority for Californians, simply deferring discussion and analysis on the specific impacts to Section 4(f) and 6(f) resources to the project level EIR is unacceptable. These resources provide amenities including: important recreation opportunities, barriers to and buffers from urban sprawl, an experience of areas with unique qualities, wildlife habitat and migration corridors, an escape from the urban environment, as well as serving as a valuable resource for both humans and wildlife. These resources are the reason why Section 4(f) and 6(f) set these areas aside for future generations. The negative impacts on both the Section 4(f) and 6(f) resources themselves and the amenities they provided should have been considered in more detail in the DPEIR/S. Indeed, the DPEIR/S approach to these resource impacts fails to reflect the “special effort” or assessment of “prudent and feasible alternatives” that Section 4(f) requires. Section 4(f) makes it clear that preservation of parkland is of paramount importance; more so than costs, directness of route, or community disruption. See *Citizens to Preserve Overton Park v. Volpe* (1971) 401 U.S. 402, 412-13. A revised and recirculated EIR/S must include a thorough analysis of these impacts.

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Section 3.16 of the DPEIR/S compared the number of Section 4(f) and 6(f) resources that would be impacted by the HSR versus No Project alternatives, which includes future transportation improvements. The section fails to disaggregate the impacts of future conditions from the impacts of HST on these resources. A simple tally of the impacts on Section 4(f) and 6(f) resources between the different alternatives deprives the DPEIR/S of any meaningful information about the nature of these impacts to these resources for each choice. Further, a mere numeric listing of resources affected by different alternatives is not an adequate analysis of the relative impact of different alternatives. The analysis must include analysis of the relative extent and severity of each impact, as well as the extent of feasible mitigation possible and the relative extents and severity of impacts before and after mitigation. It is of particular importance to compare the relative extent and severity of impacts on Section 4(f) and 6(f) resources between the Altamont and Pacheco alignment alternatives.<sup>46</sup>

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Parks, open space, wilderness, and wildlife refuges are clearly spending priorities for Californians, based on the billions of dollars that have been allocated for acquisition of such places in voter approval of several recent ballot initiatives. Extensive discussion of the HSR impact on these protected areas should have been a higher priority in the DPEIR/S. A revised EIR/S must quantify the potential impacts to significant public investments made to both publicly owned and privately owned conservation areas<sup>47</sup>.

Third, as in other environmental impact sections of the DPEIR/S, the “mitigation strategies” for 4(f) and 6(f) issues are vague and improperly deferred. Yet, based on

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<sup>46</sup> It appears that at least Pacheco State Park and San Luis Reservoir State Recreation Area would be directly impacted by the Pacheco alignment alternative. In addition, the PEIR/S needs to identify other park-related impacts, including noise and impacts on the ease of park access.

<sup>47</sup> See, for instance, the comment letter submitted by the The Nature Conservancy concerning significant properties that were purchased with public funding and whose biodiversity will be impacted by HST.

these “strategies”, a number of potentially significant impacts to these resources are concluded to be potentially less than significant after mitigation. A revised EIR/S must not only include the required analysis of these issues, but identify feasible mitigation measures, including annual operation and maintenance costs that are automatically incurred with a project of this scope. A revised PEIR/S must demonstrate and document, based on substantial evidence, how each measure actually reduces potentially significant impact to less than significant.

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Section 4(f) requires analysis of alternatives be conducted and specific mitigation measures identified before an alignment choice is made. A revised and recirculated DPEIR/S must include this information. Avoiding the impacts on Section 4(f) and 6(f) resources should be a major priority for evaluating all possible Bay Area – Central Valley routes in the revised environmental document. If these areas are ultimately to be impacted, a revised evaluation must demonstrate that there was no other option and meet the high bar set by the courts for impacting these precious resources.

**9. The DPEIR/S Fails to Adequately Analyze Cumulative Impacts.**

CEQA and NEPA require that cumulative impacts be analyzed. The CEQA Guidelines define cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” CEQA Guidelines Section 15355(a). “[I]ndividual effects may be changes resulting from a single project or a number of separate projects.” *Id.* Federal Regulations implementing the National Environmental Policy Act (NEPA) also require that the cumulative impacts of the proposed action be assessed. Cumulative impact is defined by the Council on Environmental Quality as an “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.” 40 CFR 1508.7.

A legally adequate cumulative impacts analysis views a particular project over time and must consider the impacts of the project combined with other projects causing related impacts, including past, present, and probable future projects. CEQA Guidelines 15130(b)(1). Projects currently under environmental review unequivocally qualify as reasonably probable future projects to be considered in a cumulative impacts analysis. See *San Franciscans’ for Reasonable Growth v. City and County of San Francisco*, 151 Cal.App.3d 61, 74 & n. 13 (1984). In addition, projects anticipated beyond the near future should be analyzed for their cumulative effect if they are reasonably foreseeable. See *Bozang v. Local Agency Formation Comm’n*, 13 Cal3d 263, 284 (1975). Alternatively, an EIR may utilize:

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A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.



**Comment Letter 0007 - Continued**

CEQA Guidelines Section 15130(b)(1)(B). Any such planning document shall be referenced and made available to the public at a location specified by the lead agency. Id.

The discussion of cumulative impacts must include a summary of the expected environmental effects to be produced by those projects, a reasonable analysis of the cumulative impacts, and full consideration of all feasible mitigation measures that could reduce or avoid any significant cumulative effects of a proposed project. See CEQA Guidelines Sections 15126.4(a)(1) and 15130(b)(3).

This DPEIR/S fails altogether to meet these requirements and instead only discusses present and future projects within the immediate area that the HST would traverse. Moreover, by including some future (programmed and funded) transportation projects in the No Project Alternative, the section likely understates many significant cumulative impacts.

Key transportation and other projects are omitted from the discussion and analysis (e.g. <http://www.dmbinc.com/communities/> A 4,500 acre planned community in San Benito county adjacent to the Gilroy HST station; major development proposed in the vicinity of the San Francisco Transbay Terminal HSR station; "transit village" for Union City transit hub; proposed major development at/near Sacramento Amtrak Station ). As a result of this approach, the cumulative impact analysis is improperly narrow in scope and therefore underestimates and omits cumulative impacts.

The cumulative impact analysis also fails to specify mitigation measures for cumulative impacts, as required under CEQA and NEPA.

**F. The DPEIR/S Fails to Identify Feasible Mitigation Measures**

Both CEQA and NEPA require that mitigation measures be identified and analyzed. The Supreme Court has described the mitigation and alternatives sections of the EIR as the "core" of the document. *Citizens of Goleta Valley v. Board of Supervisors*, 52 CAL.3d 553 (1990). As explained below, the DPEIR/S identification and analysis of mitigation measures, like its analysis throughout, is thoroughly inadequate.

An EIR is inadequate if it fails to suggest mitigation measures, or if its suggested mitigation measures are so undefined that it is impossible to evaluate their effectiveness. In the instant case, the DPEIR/S defers the description of meaningful mitigation measures and instead relies on vague and "future" mitigation "strategies" to suggest that potentially significant impacts will be reduced to less than significant. Improperly deferred details of mitigation measures include, but are not limited to the following:

- Traffic and Circulation: Encourage use of transit to stations. Work with transit providers to improve station connections. Note that the feasibility of this mitigation is dramatically affected by alignment choice, yet the DPEIR/S does not take this into account.

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- Land Use: "Continued coordination with local agencies. Explore opportunities for joint and mixed-use development at stations. Relocation assistance during future project-level review." Note that alignment choice and station locations would have a large impact on the feasibility of this proposed mitigation.
- Growth Potential: "Work with local communities to encourage higher density development around stations." Note that the potential for higher density development around stations can vary considerably depending on alignment and station location.
- placing bridges on piers to minimize impact on wetlands
- trading wetland sites if necessary
- creating incentives for using transit systems such as replacing free parking with free or discounted transit passes
- providing for free shuttle services between regional rail stations and major employment centers
- providing sound walls where necessary
- ensuring that connections between trunk line rail services and feeder lines are fast, efficient and reliable

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All of the recommended mitigation "strategies" adhere to a backward standard that is analogous to closing the barn door after the horses have already escaped. By deferring the need for mitigation until project-level environmental review, the DPEIR/S ignores critical mitigation issues that must be addressed before alignment decisions are made and before growth-induced ongoing impacts occur.

0007-151

Again, a revised EIR/S must include adequate and feasible mitigation measures to address both project-related and cumulative impacts based on the "whole" project and a complete list of cumulative projects. Mitigation measures must be accurately presented in terms of their feasibility, including costs.

**G. The DPEIR/S Fails to Characterize the Significance of All Potential HST Alignment and Station Alternatives**

The DPEIR/S fails to clearly and properly identify the impacts of each HST alternative alignment and station before and after mitigation as compared with the existing environment. The DPEIR/S identifies the following impacts of the HST "system," (as compared with the No Project Alternative), as follows:

0007-152

- Potentially increase the load on the statewide electric power system by an estimated 794 MW during the peak period in 2030;
- Impact biological resources including wetlands and habitat for threatened and endangered species;
- Impact agricultural lands;



**Comment Letter 0007 - Continued**

- o Impacts on 4(f) and 6(f) resources.

This list and the related Table (9.3-1) are defective for a number of reasons. First, they only characterize the impacts of the HST “network” in comparison with the No Project Alternative and fail to characterize the differences between Pacheco and Altamont alignments. Second, the information to support this list is inadequate. The DPEIR/S restates that “Only general statements of potential impacts can be made at this program level of review because detailed field studies were not conducted...” DPEIR/S at 9-2. Moreover, the document states that potential impacts would need to be further studied and clarified in the next stage of project design when more specific information would be available on the amount and location of right-of-way needed for the alignments and stations. DPEIR/S at 9-2. The fact remains that, based on the PEIR/S, decisions will be made that will determine alignments and, at least generally, station locations. At least to that extent, the discussion of impacts may not be put off for future study. Rather, sufficient information about potential impacts must be provided in this PEIR/S so that the impacts of the alternative alignments and stations can be usefully compared.

Finally, the DPEIR/S creates its own unauthorized categorization scheme when it concludes that many of the impacts are “Potentially less than significant.” DPEIR/S at 9-8. There is no such category available for CEQA documents. Impacts are either Significant and Unavoidable, Potentially significant, Less than Significant with Mitigation, or Less than Significant. The DPEIR/S impermissibly attempts to finesse its lack of required information through vagueness and creativity. Under CEQA, however, the impacts must be categorized on the basis of information in the record, using approved categories. Decision makers, and the public, need to know whether an impact can be mitigated or not. Calling an impact “potentially less than significant” does not satisfy that need. If mitigation is clearly feasible and will clearly suffice to reduce the impact to a level of insignificance, it should be so stated and the mitigation specified as required. Otherwise, the impact needs to be treated as significant. For these reasons – that more information and study is needed; along with the lack of evidence to support the DPEIR/S’s assertion that so-called “deferred” “mitigation strategies” will suffice to reduce the Project’s potentially significant impacts on water quality and hydrology, geology, and a myriad of other areas to less than significant – this list is without merit.

Table 9.3-1 provides a summary of Key Environmental Impact/Benefits of Alternatives, but only for HST as compared with No Project. No such summary is provided to compare the two key alternatives – Pacheco and Altamont. This table can reasonably be expected to be the main, if not only source of such information for the public and decision makers unless they review each section of the DPEIR/S in detail. The omission of a summary comparison between the key alternatives, along with the DPEIR/S’ deficient and non-conforming analysis, make this document inadequate to guide the CHSRA in selecting a Bay Area – Central Valley HST alignment and associated station locations.

As stated above, the Table’s conclusions that numerous significant impacts will be less than significant with “deferred” mitigation or beneficial before mitigation are

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unsupported by evidence including, but not limited to: Traffic and Circulation, Energy Use, land use, visual quality, noise, hydrology and water resources, growth potential, public utilities and services, geology, and hazardous materials. A revised PEIR/S must clearly characterize the significance of impacts for each alignment and station alternative by environmental topic before and after mitigation. Facts and evidence must be provided to support conclusions that impacts will either be beneficial or less than significant after mitigation.

O007-152  
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**H. The DPEIR/S Fails to Analyze Alternatives Adequately**

The DPEIR/S fails to adequately analyze the included alternatives and inappropriately eliminates other alternatives from consideration without justification. Here are some examples:

O007-153

Route segments listed in **Table 2.5-4** as having been eliminated from further consideration include the option of routing the line from Fremont Central Park to the Great Mall in Milpitas along the WPRR rail line, using among others a segment of the former WPRR between Warm Springs and San Jose (DPEIR/S page 2-43). The DPEIR/S eliminates this alignment alternative for reasons of “constructability” and “Right-of-Way” without presenting any evidence that these problems exist to any greater degree in the WPRR alternative than in the alternative carried forward, which would place the HSR line in the median of I-880.

O007-154

Furthermore, the entire segment is eliminated because of stated problems with the section south of Hwy 101, even though a reasonable alternative could use the section north of Hwy 101 (DPEIR/S, Appendix G, page 2-G-5).

Additionally, the DPEIR/S improperly assumes that the BART extension between Warm Springs and San Jose will be built in that segment, even though that BART project not only has not been built, but has significant funding shortfalls and has not even received a federal record of decision (DPEIR/S, Appendix G, page 2-G-4). The PEIR/S should be revised to discuss how the configuration of this HSR alignment will be modified if this BART extension is not built.

O007-155

The stations in the Fremont area proposed for the Altamont alternative are located without a single station on a direct line to both San Jose and San Francisco. (Such a station is specifically proposed in the BayRail Alliance “Caltrain Metro East” proposal as presented on public display boards by MTC and CAHSRA staff at the joint Bay Area to Central Valley HST PEIR Scoping Meetings/Regional Rail Plan Community Workshops in November and December 2005.) Instead, the DPEIR/S inflates the cost and reduces connectivity and performance of the Altamont alternatives by proposing three separate stations (Union City, Shinn, and Warm Springs) on three separate branches within 10 miles of each other while ignoring the downtown Fremont area. This portion of the Altamont alignment option needs to be reconfigured so that 1) it connects downtown Fremont to both the San Jose and San Francisco main lines and 2) reduces the number of suburban stops by eliminating at least one of the three current stops. Any remaining

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recirculation of a draft EIR/S where, as here, the document is so fundamentally inadequate in nature that meaningful public review and comment are precluded. See CEQA Guidelines § 15088.5.

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Cont.

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**CONCLUDING COMMENTS**

Again, we appreciate the opportunity to comment on the DPEIR/S. Please keep the following individuals listed below informed of any and all upcoming matters related to the HSR project.

O007-161

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Sincerely,



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**ATTACHMENTS:**

- Exhibit A - Resumes of experts consulted
- Exhibit B - Testimony of Dr. Michael White, Senior Ecologist, Conservation Biology Institute
- Exhibit C - Photos and Schedules for HSR lines that split trains in France and Germany
- Exhibit D - Population and distance for the two alignments
- Exhibit E - Memos from California Attorney Generals on CO2 analysis requirement in CEQA
- Exhibit F - Grasslands Ecological Area Land Use and Economic Study

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**Response to Letter O007 (Stuart M. Flashman, October 25, 2007)**

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**O007-1**

The Authority and FRA acknowledge receipt of comments from Stuart M. Flashman and the groups that Mr. Flashman is representing in his letter, including Bay Rail Alliance, California Rail Foundation, California State Parks Foundation, Defenders of Wildlife, Grassland Water District, Planning & Conservation League, Regional Alliance for Transit, Sierra Club, Train Riders Association of California, and TRANSDEF.

**O007-2**

The Authority and FRA do not agree with the contention that the Draft Program EIS/EIS fails to comply with CEQA and NEPA. Please see responses to comments below. The Authority and FRA acknowledge receipt of comments on the prior statewide draft Program EIR/EIS from the groups identified in Mr. Flashman's letter. Please see Standard Responses 1 and 2.

**O007-3**

Please see Response to Comment O007-2. The Authority and FRA have fully analyzed multiple alignment and network alternatives and station location options, consistent with the Authority Board directive to perform such an analysis. The comprehensive evaluation is presented in the Draft Program EIR/EIS.

The Altamont Pass alternative is not identified in this document as the Preferred Alternative for the reasons provided in Chapter 8 of this Final Program EIR/EIS. Concerns regarding assumptions made in the choice of alternatives and the methods used in the analysis are discussed below. Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative. Responses to your previous comments were included in the final program EIR/EIS that was certified in November 2005.

**O007-4**

The Authority and FRA do not agree with the contention that the Draft Program EIR/EIS was released in haste. Rather, the document was developed in a deliberative and comprehensive manner and was released once it was completed. Information was not omitted. Please see Standard Responses 1 and 2.

The Authority and FRA do not agree that the rail ridership and impact analyses presented in the Draft EIR/EIS are deficient. Revision to the Draft Program EIR/EIS with a recirculation is not necessary. Please see response to comments below, especially Response to Comment O007-46.

**O007-5**

The Authority and FRA disagree with this statement. Each of the alleged defects and omissions of the Draft Program EIR/EIS are responded to below. The Draft Program EIR/EIS appropriately describes the HST project alignment, station, and network alternatives in Chapters 2 and 7 and the plans/profiles and station concepts are provided in the appendices.

**O007-6**

The Authority and FRA disagree with this statement. The Summary in the Draft Program EIR/EIS presents a concise summary of the HST purpose and need, project alternatives, and associated impacts and compares the major differences of the alternatives.

**O007-7**

The Authority and FRA disagree with this statement. Please see Response to Comment S009-17 and also see Standard Responses 1 and 2.



**O007-8**

The Authority and FRA disagree with this statement. Ridership forecasts for the Pacheco Pass (with termini in San Jose and San Francisco) and the Altamont Pass (with termini in San Jose and San Francisco) have been used as the *representative demand* for defining the intercity travel need for the HST alignment alternatives in this Program EIR/EIS.

The projected HST travel times account for alignment, train performance characteristics, acceleration and deceleration capabilities, and passenger comfort criteria. HST system operators and manufacturers of HST equipment were consulted in the development of the travel times and design criteria for the proposed HST system.

Ridership for the HST system is now estimated to be between 88 million and 117 million passengers for 2030, with a potential for further ridership growth beyond 2030. These new ridership forecasts are higher than those analyzed in the previous program EIR/EIS for the HST system; however, this analysis is consistent with that provided in the previous document because the infrastructure and facility footprints analyzed in that document would accommodate the new ridership forecasts. The purpose of and need for this project is to meet a part of California's future intercity travel demand in 2030 and beyond. Although the HST system would have the capacity to carry many more passengers than indicated in the high-ridership forecast, by using longer trains, double-decker cars, or more frequent service (e.g., the Shinkansen system in Japan carries more than 300 million passengers annually), it is reasonable to assess the HST alternatives using forecast ridership rather than theoretical capacity.

**O007-9**

The Authority and FRA disagree with this statement. Please see Response to Comment O007-46.

HST ridership (including commuters and non-commuters) in the corridor between Sacramento, the San Joaquin Valley and the San

Francisco Bay Area was fully analyzed and considered in the Program EIR/EIS, contrary to the assertion in the comment. The HST ridership and revenue model is the most complete, accurate, and up-to-date tool for forecasting travel demand across California. It was specifically designed, developed, and calibrated to assess travel demand between regions of the state, such as the corridor between Sacramento, the San Joaquin Valley, and the San Francisco Bay Area. The forecasting process and results have been completely documented in a series of technical reports that are posted on the California High-Speed Rail Authority web site at <http://www.cahighspeedrail.ca.gov/ridership/>.

These reports have been available at this location throughout the public comment period for the Draft Program EIR/EIS.

**O007-10**

The FRA and Authority disagree with this statement. The Draft Program EIR/EIS evaluates an appropriate range of alternatives. Please see responses to comments below.

**O007-11**

The Authority and FRA disagree that the analysis and the supporting information in the Draft Program EIR/EIS are inadequate. Please see responses to comments below.

**O007-12**

The Authority and FRA disagree with this statement. Please see responses to comments below.

**O007-13**

The Authority and FRA disagree with this statement. Please see Standard Response 5 regarding mitigation strategies.

**O007-14**

Please see Response to Comment L029-70, which notes that the environmentally superior alternative is identified in Chapter 8 and the Summary of this Final Program EIR/EIS.



**0007-15**

The Authority and FRA disagree with this statement. Please see Standard Response 4 regarding growth and Chapter 5.

Contrary to the assertion in the comment, the Program EIR/EIS fully analyzes, describes, and compares the growth-inducing effects and secondary impacts of all alternatives, including No Project, Altamont Pass, and Pacheco Pass. This analysis included all network, alignment, and station location options for the Altamont Pass and Pacheco Pass alternatives. Sections 4.2 and 5.2 of the technical report on economic growth effects<sup>2</sup> provide a detailed review of growth-inducing differences between the alternatives, and these differences are fully disclosed in summary fashion in Section 5.3.

The impact assessment methodology used for economic growth and related impacts followed a multi-tiered analytic process. The methodology first used the Authority's intercity travel demand model to estimate benefits (e.g., reduced travel time and/or cost) of each system alternative for air, highway, or conventional rail systems. In this analysis, the quantification of travel time, cost, accessibility, and societal (pollution or accident reduction) benefits reflects the mobility enhancement provided by each system and allows the HST ridership and revenue model to estimate user, nonuser, and accessibility benefits from the introduction of HST.

The second step used a regional econometric model (TREDIS-REDYN) to forecast population and industry-specific employment growth due to the introduction of an HST system. The Transportation and Economic Development Impact System (TREDIS) is an integrated modeling framework that combines a business attraction model and an economic model for the California economy and subregions. The economic model combines input-output, cost/response, and trend-forecasting elements to assess direct economic impacts and their potential to create additional multiplier effects on the regional and statewide economies of California.

<sup>2</sup> Economic Growth Effects Analysis for the Bay Area to Central Valley Program-Level Environmental Impact Report and Tier 1 Environmental Impact Statement – Final Report; Cambridge Systematics, Inc.; July 2007.

Third, output from TREDIS was input into a spatial allocation model, the California Urbanization and Biodiversity Analysis (CURBA) model. CURBA is a spatial-decision support system developed within the ESRI ArcGIS software package by the University of California at Berkeley's Institute of Urban and Regional Development. CURBA takes employment and population growth information and uses a number of historically calibrated spatial statistical models to assign residential growth to various locations in and around California's urban areas. By spatially allocating population and employment throughout each county, infill potential and magnitude of currently undeveloped land needed to accommodate growth for each alternative was determined. This assessment of likely urbanization patterns was driven by three key pieces of information: local land use, zoning, and employment data; national and international experience with station area development trends related to HST and fixed guideway transit; and county-level industry employment and population estimates.

This analytic framework for approaching the evaluation of economic and related impacts is accepted and well documented in professional literature<sup>3</sup>. Within this body of literature, there is also recognition that the application of regional econometric and spatial allocation models for project economic impact evaluation is currently serving as a best practice for estimating the indirect effects of transportation projects. Both TREDIS and CURBA have been independently validated to current conditions, have been used for other projects in the state, and are regarded as state-of-the-practice forecasting tools for California.

<sup>3</sup> See, for example: Avin, Uri, R. Cervero, T. Moore, and C. Dorney; Forecasting Indirect Land Use Effects of Transportation Projects, NCHRP 25-25, Task 22, National Cooperative Highway Research Program, Transportation Research Board, 2007; and The Louis Berger Group, Inc.; Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects, Transportation Research Board – NCHRP Report 466, 2002; and Parsons Brinckerhoff Quade and Douglas, Inc.; Land Use Impacts of Transportation: A Guidebook, National Cooperative Highway Research Program, Transportation Research Board, 1998.



**O007-16**

Please see Response to Comment L029-70, which notes that the environmentally superior alternative is identified in Chapter 8 and the Summary of this Final Program EIR/EIS.

**O007-17**

The Authority and FRA disagree with this statement. See Standard Response 1. The Draft Program EIR/EIS provided for public review and comment on the analysis of the environmental consequences of the alignment and network alternatives and station location options. The Preferred Alternative identified in this Final Program EIR/EIS would meet the purpose and need of the project and avoid and reduce environmental damage, as described in Standard Response 3 and Chapter 8.

**O007-18**

The Authority and FRA do not agree with Mr. Flashman's suggestion that the findings would force selection of the Altamont alignment. The underlying reasons for identifying the Pacheco Pass as the Preferred Alternative are presented in Chapter 8 of this Final Program EIR/EIS, which explains that identification of the Preferred Alternative is based on a review of the purpose of and need for the HST system and the environmental effects of the various alternatives. Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.

**O007-19**

See Response to Comment L019-9.

As noted in Chapter 8 of this Final Program EIR/EIS, the Preferred Pacheco Pass Alternative is no less integrated and efficient than the Altamont Alternative. For example, it would not require splitting train service or reducing the frequency of trains to serve the largest population centers in the Bay Area, namely San Jose and San Francisco. It would allow for an integrated HST and commuter service along the Caltrain Corridor and provide service to the growing areas in the Salinas and Monterey Bay area.

Travel times between northern and southern California for Altamont Pass and Pacheco Pass are roughly equivalent, and travel times between the northern San Joaquin Valley and San Francisco are less for the Altamont Pass alternative. These factors are clearly noted in the Draft Program EIR/EIS and in the discussion of the Preferred Alternative provided in Chapter 8. Chapter 8 notes that there are a number of important trade-offs among the alignment alternatives and station location options, all of which were considered in the course of identifying a Preferred Alternative. Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.

**O007-20**

The Authority and FRA disagree with this statement. The ridership evaluation was performed with the best information and tools available and at an appropriate level of detail for the decisions to be made on this document. The ridership analysis concluded that both the Altamont and Pacheco Pass alternatives would have substantial and generally equivalent ridership. Please see Response to Comment L035-2 for a discussion of access differences to HST as well as factors that underlie differences in ridership and revenue-generation potential between Altamont Pass and Pacheco Pass alternatives.

**O007-21**

The reductions in highway vehicle miles traveled (VMT)—congestion relief—on the specific freeway/highway segments varies, depending on the alignment. Please see Table 3.1-2. As shown, both the Altamont and Pacheco Pass alternatives result in congestion relief across the region, with peak period trip diversions ranging 0.6 to 20.2% for various roadway sections. Where a freeway segment is in the vicinity of a proposed HST station, there can be an increase in traffic of about 0.5% due to additional trips going to and from the station. Please also note that the diversions are apparent for virtually all roadway/highway segments, regardless of the alignment, with relatively larger diversions apparent on roadways parallel to an alignment. Thus, both the Pacheco and Altamont Pass alternatives



do meet this portion of the project purpose and need, but the differences among the alternatives were not substantial. Each provided this benefit, but the Pacheco Pass alternative was slightly higher.

As a result, the identification of the Preferred Alternative did not isolate this one project purpose but rather took into account the full range of HST purposes and needs and the key differences among the alternatives. Please see Standard Response 3 and Chapter 8 regarding identification of Pacheco Pass as the Preferred Alternative.

### **0007-22**

Removing impediments to San Francisco Bay tidal flows and currents and wildlife connectivity would require removal of the existing Dumbarton rail corridor across the Bay and replacing it with a crossing that would work for both HST and the Caltrain Electrical Mechanical Unit (EMU) technology and number of tracks being proposed as part of the Dumbarton Rail project.

As noted in Chapter 2, the approval of Regional Measure 2 (RM2) in March 2004 included funding to reconstruct the out-of-service Dumbarton Rail line between southern Alameda County and the San Francisco Peninsula. The reconstructed rail bridge across the Bay would be the key component in the establishment of the commuter rail service between the Union City BART station and the Caltrain line on the peninsula. Rail equipment comparable to current Caltrain rolling stock is expected to be employed. The reconstructed Dumbarton segment includes embankment, trestle structure, and two swing bridges; most of the segment is single track with limited passing sidings. The project is currently being considered for phased implementation due to funding constraints and the inability to reach a track-sharing agreement with the UPRR. On March 26<sup>th</sup>, 2008, a presentation was given to the Dumbarton Policy Advisory Committee on the status of the Dumbarton and Newark Bridges. While the conclusions are not final regarding the structural condition of the bridges, the structures are very deteriorated and realistically not capable of supporting a HST system.

The Dumbarton Rail project might be able to be completed prior to implementation of the HST system, but it would conflict with the proposed HST system. The HST system planned for 2030 includes at least two tracks for all of the system and does not include a single track as planned for the Dumbarton Bridge, which would not accommodate HST service. The HST system would also conflict with the Caltrain JPB EMU option. A retrofitted Dumbarton rail crossing does not meet the criteria of the HST system of full grade separation, speed, reliability and safety criteria due to the use of swing bridges. If high-density regional rail service is developed in the future along this route, a double track bridge across the bay would be necessary and would likely result in significant impacts on San Francisco Bay, Don Edwards San Francisco Bay National Wildlife Refuge (Refuge), aquatic resources, and sensitive plant and wildlife species. This would also hold true for adding HST service across the Bay.

The HST alignments that cross the Bay along the Dumbarton corridor would have a significant impact on the bay and its aquatic resources, including wetlands and sensitive plant and wildlife species in addition to the Refuge. Much of the area surrounding the bay is already protected and there are challenges for developing substantial mitigation strategies. The preferred Pacheco Pass network alternative identified by the Authority would not require a bay crossing, would not affect any established Refuge, and would result in fewer impacts on wetlands and aquatic resources than the Altamont Pass network alternatives. The Pacheco Pass network alternative, although it would pass through the area identified as the GEA, would have less impact than would crossing the Bay and the Refuge. The magnitude of impacts on biological resources of the Bay crossing would be greater than the impacts along the Pacheco alignment. In the area along Henry Miller Road and through the Diablo Range, the Authority would work with stakeholders in developing mitigation that would benefit the GEA and surrounding area. In addition, engineering design refinements would be undertaken to avoid and/or minimize environmental impacts. This will include evaluating design alternatives to the north and south of



the current proposed Henry Miller alignment (between the Central Valley and the Pacheco Pass).

The potential to induce growth within the GEA or the Los Banos area would be limited because no station or maintenance facility would be located in this area. The closest proposed stations are located in Merced and Gilroy. Growth-inducing impacts are discussed in Chapter 5.

As noted above, the HST system would not be compatible with the Dumbarton Rail service technology and would require more tracks. A tunnel or high bridge across the Bay to replace the current Dumbarton rail bridge would require a larger tunnel or bridge and have larger potential impacts on the Bay and the Don Edwards Refuge and result in higher costs. A tunnel would not necessarily remove all impacts on the bay or refuge.

The Authority received comments signed by five members of Congress and four members of the California Legislature stating that any alternative requiring construction through the refuge with additional impacts on the Bay and Palo Alto shore of the Bay should be rejected. The City of Fremont opposes the Dumbarton alternatives because of the potential impacts on Fremont neighborhoods. Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative and Chapter 8 for more detail.

#### **0007-23**

The Authority and FRA do not concur and find the Draft Program EIR/EIS to be adequate. The Authority and FRA find that recirculation of the draft document is not warranted.

The Authority and FRA acknowledge receipt of comments from Mr. White and Ms. Watt and their resumes. Please see Standard Responses 1 and 2.

#### **0007-24**

Please see Standard Responses 1, 2, and 5. The Authority and FRA believe that the Draft Program EIR/EIS does adequately analyze, to

the extent currently feasible, all potential impacts that may arise from the alternatives described in Chapter 2. Extensive data and information were collected and analyzed and are presented in a comprehensive and systematic manner for numerous subject areas for all of the Bay Area to Central Valley alignment alternatives and station location options.

Chapter 3 lists mitigation strategies for each type of impact. Please see Standard Response 5 regarding mitigation strategies.

#### **0007-25**

The Draft Program EIR/EIS describes impacts as potentially significant or insignificant. It is common practice to use information from planning and transportation funding documents to describe a foreseeable future condition, and this is the approach taken in the Draft Program EIR/EIS. The assumptions are therefore supported by state, regional, and local planning and transportation funding plans.

This Program EIR/EIS appropriately evaluates the environmental effects of the proposed HST system at the earliest possible stage and identifies potentially significant impacts and mitigation strategies to address such impacts.

The Draft Program EIR/EIS presents the impacts for all alignment alternatives and station location options. A comparison is then made of the impacts and benefits of all alignment alternatives and 21 representative network alternatives—not two alternatives – in Chapter 7. The 21 network alternatives are also compared in the Summary. The network alternatives are not described as “preferred” but rather as “representative.” Please also see Standard Responses 1 and 2.

#### **0007-26**

Alignment maps in the appendices are overlain on aerial photography, and the proposed alignment profile is provided (surface, aerial, trench, tunnel) for purposes of performing the environmental analysis. The scale is sufficient to generally identify adjoining land uses, and Section 3.16 identifies the parklands and



other 4(f) and 6(f) resources that are within specified distances (e.g., 1–150 feet) from the alignments. This represents a conservative approach for identifying potential impacts on resources in the defined study areas. More detailed analysis of impacts will be provided in Tier 2 project-level environmental documents when more detail will be available for system engineering, system design features, the location of facility footprints, and variations in the selected alignment. Please also see Response L029-57 regarding the Section 4(f) process.

**O007-27**

See Response to Comment O007-46.

**O007-28**

Significance levels in this Program EIR/EIS have been determined based on similar projects in similar settings, which is appropriate for this analysis. These determinations are not speculative but rather are based on appropriate evaluation techniques for a program-level EIR/EIS. See also response to comment O007-25.

**O007-29**

The Authority and FRA disagree with this statement. Extensive data and information were collected and analyzed and potential environmental consequences are presented in a comprehensive and systematic manner throughout the Draft Program EIR/EIS for numerous subject areas for all of the Bay Area to Central Valley alignment alternatives and station location options.

During the EIR certification process, a mitigation monitoring plan will be adopted as part of the project approval. Please see Standard Response 5 regarding mitigation strategies. Please also see Response to Comment O007-28 regarding determinations of significance.

**O007-30**

Please see Standard Responses 1, 2, and 5. Intersection, physical, and operational street improvements, and parking facility locations

and sizes are standard mitigation for traffic and parking impacts associated with rail transit stations. The parking analysis in Section 3.1.3 does describe, based on the current conceptual facility planning, the number and general location of necessary additional parking spaces for each HST station. Detail is given by the station fact sheets in Appendix 2F. Note that these demand numbers are based on a probable worst-case parking demand. The station traffic impact analyses were also based on link analyses of specific streets under a probable worst-case HST traffic demand. These results are summarized by the screenline results reported in Table 3.1-3, Impacts to Traffic, Transit, and Parking from HST Station Location Options, and the individual streets examined are illustrated by the screenline diagrams in Appendix 3.1-A, Station Location Street Maps.

Specific intersection, physical, and operational street improvements and other specific mitigations cannot be defined until the project-level environmental review and preliminary engineering phase of a project.

**O007-31**

Please see Standard Responses 1, 2, and 5.

**O007-32**

See Standard Response 5 regarding mitigation strategies. The construction costs for the network alternatives included mitigation costs as well as contingency costs. Costs are discussed in Chapter 4. Future project-level Tier 2 environmental documents will further refine these costs when specific details are known.

Broad mitigation strategies were identified at the program level for potential significant impacts. Analyzing secondary impacts requires a level of specificity that will be available as the design progresses and will be analyzed as part of the Tier 2 project-level environmental analysis.

Chapter 9 discusses unavoidable adverse environmental impacts and identifies significance before and after mitigation is applied. Section 3.17 discusses cumulative impacts and significance. Mitigation



strategies throughout the document would be applied to cumulative impacts.

### **0007-33**

The Authority and FRA do not agree that the identification and analysis of potentially significant effects and the provision of mitigation strategies and measures in the Draft Program EIR/EIS are inadequate. As evidenced by the numerous comments on the Draft Program EIR/EIS, agencies, organizations, elected officials, and citizens have established strong positions regarding the best alignment using information contained in the document, citing effects and benefits shown in the draft document.

The Authority will make a determination regarding project approval, and the adequacy of this Final Program EIR/EIS to take such action, following release of this Final Program EIR/EIS. The Authority and FRA find that recirculation of the Draft Program EIR/EIS is not necessary. See Standard Responses 1, 2, and 5.

### **0007-34**

The Authority and FRA agree that the environmental document should be well organized, clear, readable, and useful and understandable to differing audiences, and worked to ensure that the Draft Program EIR/EIS met these objectives.

As noted in the letter, the HST Program is one of the largest infrastructure projects ever contemplated for California. Thus, a broad range of alternatives are evaluated in the Draft Program EIR/EIS. A clear and concise set of network alternatives were therefore reviewed and evaluated in Chapter 7 and in the Summary. The network alternatives are made up of various combinations of alignments, providing services to differing terminal stations.

The environmental consequences and transportation characteristics of each of the alignment alternatives and 21 network alternatives are comprehensively presented in Chapter 7 and are summarized in a clear and consistent format in the Summary. Major differences among these alternatives are discussed, and the reader can

objectively compare key aspects, including environmental effects, of each of the 21 network alternatives (Table S.8-1).

The Authority and FRA reviewed a reasonable range of alternatives for the Bay Area to Central Valley study area, consistent with the Authority Board directive and the requirements of CEQA and NEPA. The Authority and FRA disagree with the letter's contention that there are an "excessive" number of alternatives in the document. Please note that, by design, each of the network alternatives discussed in the Summary constitute a complete alignment linking the Bay Area to the Central Valley for the HST system. They are not subalignments but rather full HST networks serving different termini, thus allowing for a clear choice among these alternatives.

Understandable maps for each network alternative are provided in Chapter 7 and referenced in Table S.8-1 of the Summary, providing the reader with a clear indication of the stations and alignments included in each network alternative. Rather than obfuscate, the Table S.8-1 and the corresponding discussion provide concise, objective, and uniform comparison of the key differences among a reasonable range of alternatives.

### **0007-35**

The environmental impacts listed on the second page of Table S.8-1 are clear, complete, and accurate. As shown, this table includes information on farmland, prime farmland, floodplains, streams, water bodies, wetlands, nonwetland water, special-status plants, special-status wildlife, cultural resources, fault crossings, and 4(f) and 6(f) properties. As noted in the Summary, these alignment impacts were arrayed in the table given that there were clear differences for these effects. While not shown on the maps, the number of 4(f) and 6(f) properties within 150 feet of the alignment is enumerated in Table S.8-1.

### **0007-36**

This paragraph is referring to the complex choice to be made to identify a Preferred Alternative—not to the adequacy of the information. See Standard Responses 1 and 3 regarding



programmatic decision and identification of Pacheco Pass as the Preferred Alternative.

### **0007-37**

This combined program-level environmental document complies with NEPA requirements for the preparation of an EIS and with CEQA requirements for an EIR. Use of the term “significant” differs under these two laws. While CEQA requires that a determination of significant impacts be stated in an EIR, NEPA does not require such a determination in an EIS. Under NEPA, significance is used to determine whether an EIS or some other level of documentation is required, and once a decision to prepare an EIS is made, the EIS reports all impacts and proposes mitigation wherever it is feasible to do so.

For this reason, CEQA significance determinations are focused in the sections entitled “Mitigation Strategies and CEQA significance Conclusions” for each section of Chapter 3, “Affected Environment, Environmental Consequences, and Mitigation Strategies,” and summarized in Chapter 9.

As stated in Chapter 9,

*Only general statements of potential impacts can be made at this program level of review because detailed field studies were not conducted and the study areas used for some of the analysis was many times larger than the actual right-of-way (direct impact areas) for the network alternatives under consideration in most instances. Potential impacts would need to be further studied and clarified in the next stage of project design and environmental review, when more specific information would be available on the right-of-way needed for proposed HST Network Alternatives alignments and station location options and on the specific properties potentially affected. The objective at the project-specific stage of analysis would be to identify design options (plans and profiles) that would avoid these sensitive resources to the extent feasible.*

Similarly, mitigation strategies have been identified in this Program EIR/EIS for expected impact areas, and they will be refined and applied in future project-level documents.

Given these factors, Chapter 7 does report environmental impacts prior to mitigation, which enables a meaningful comparison of the alignment and network alternatives and station location options.

The identification of mitigation indicates expected impacts that may be significant under CEQA. NEPA anticipates that mitigation will be provided for the impacts of a project where it is feasible to do so. For this reason, some mitigation measures described in this document and in this section would be appropriate under NEPA, although the impacts they address may not be considered significant under CEQA.

### **0007-38**

The Authority and FRA disagree with this statement. These reports were referenced and evaluated adequately and are discussed in Appendix 3.17-A and Chapter 2.

### **0007-39**

The Authority has worked collaboratively with MTC, Caltrain, Capitol Corridor, BART, ACE, and many other transit, planning, and funding agencies and transit providers to understand, coordinate, and integrate HST alternatives with other rail planning efforts. Authority staff were participants in the Regional Rail Plan, serving on the plan’s management committee along with MTC, BART, and SamTrans. This participation provided the Authority with the opportunity to coordinate with the Regional Rail planning process and work directly with such major rail agencies in the region. In fact, most of the HST alignment conceptual drawings were produced in collaboration with and as part of MTC’s Regional Rail Plan. The conceptual plans developed as part of the Regional Rail Plan are provided in the appendices. Additionally, the Program EIR/EIS scoping meetings were conducted collaboratively with the initial round of Regional Rail public meetings.

The Authority reviewed these various planning documents and participated in the regional rail planning process, to determine how best to integrate an HST system into regional transit network. But the Authority and FRA do not agree that a summary of these other



plans is a necessary or useful addition to the Program EIR/EIS Summary, particularly since these plans were developed to serve different purposes than the HST Bay Area to Central Valley alignment and environmental review. Please also see Response to Comment O007-34.

#### **O007-40**

The Draft Program EIR/EIS does report reductions in regional and subregional automotive trips that currently congest the Bay Area highway system. As noted in Response to Comment O007-21, vehicle mile reductions along the regional freeways and roadways are provided in Table 3.1-2. The commenter's suggestion that this is a deficiency is therefore not correct.

The Authority and FRA are aware of the synergy between statewide, regional, and commuter rail services and the opportunity to locate local regional rail stations (with at least four tracks) along HST alignments. Given the existing Caltrain Corridor, the Preferred Alternative identified in this Final Program EIR/EIS would take advantage of the opportunity to integrate these services, for instance. Please also see Response to Comments O007-39 and O007-46.

The ridership and revenue model used for the Program EIR/EIS explicitly includes and analyzes a variety of trips described by the commenter including, but not limited to, trips between counties in the Central Valley, trips between the Central Valley and the Bay Area, and trips wholly within the Bay Area (including "regional" and "subregional" trips). The Program EIR/EIS and supporting technical reports on HST ridership and revenue explicitly identify the potential for HST alternatives to serve both interregional and intraregional (i.e., regional and subregional) travel. The ridership and revenue model also explicitly analyzes the interaction between the HST system and other regional and intercity rail services, such as Amtrak, BART, Caltrain, ACE, Muni. The ridership and revenue model analyzes this interaction as both a synergistic system (e.g., regional rail services provide access to and egress from the HST system) and

as modal competitors (e.g., HST and Caltrain serving the same markets along the peninsula).

#### **O007-41**

The proposed HST system is adequately described in Chapter 2 for this program level analysis. Section 3.5, "Energy," provides an analysis of the electricity demand and generation capacity outlook, as well as impacts associated with use of this energy. Additionally, Section 3.18, "Construction Methods and Impacts," describes construction methods and associated construction impacts. See also Response to Comment O007-42.

#### **O007-42**

The full extent, including all components, segments, and future phases as currently known by the Authority and FRA, are disclosed in the Draft Program EIR/EIS. Please see Standard Response 2. The proposed Bay Area to Central Valley portion of the HST system has not been divided into smaller segments to avoid disclosure and analysis of the full environmental effects, and the Draft Program EIR/EIS includes related actions.

#### **O007-43**

Key features of each proposed alignment are provided in the Draft Program EIR/EIS. The appendices provide plans and profiles for each alignment and concept drawings for each station location option. Text, tables, and maps of the alignments are provided in Chapter 2. The maps in Chapter 2 and the plan/profile drawings show what portions of the alignments are trench, tunnel, embankment, cut and fill, retained fill, or aerial. A description of HST system operations is also provided in Chapter 2. Construction methods are described in Section 3.18.

#### **O007-44**

It is not possible to convey all ridership results in the body of the Draft Program EIR/EIS. Key comparative ridership information that identifies substantive differences between network alternatives,



alignment alternatives, and station location options is fully disclosed in the Summary and Chapters 2 and 7. Remaining ridership results and full documentation of the methodology used to obtain projected ridership have been completely documented in a series of technical reports that are posted on the Authority website at <http://www.cahighspeedrail.ca.gov/ridership/>. These reports have been available at this location throughout the public comment period for the Draft Program EIR/EIS.

The ridership and revenue analysis correctly reflect the operational assumptions that were made for each network alternatives, alignment alternatives, and station location options.

#### **O007-45**

Please see Response to Comment L018-7 for information related to the source of projected HST ridership. As noted in that response, about 98% of the HST system's ridership would be made by other travel options if there were no HST. The sources of HST ridership are nearly identical for Altamont Pass and Pacheco Pass alternatives.

#### **O007-46**

Table 4.3-2 outlines the costs associated with the operation of the HST system. Included in those costs is a marketing and reservation cost that would account for ridership development. The Program EIR/EIS defines the proposed project (the HST system). Please refer to the "Purpose and Need" (Chapter 1) and "Project Description" (Chapter 2). The ridership forecasts include both interregional and intraregional passengers that would use the proposed HST system. The ridership and revenue forecasts include both inter-regional and intra-regional passengers that would use the proposed HST system; see Response to Comment O007-40 for further explanation. The Program EIR/EIS does **not** include the additional ridership or the cost of additional infrastructure (stations, tracks, or other infrastructure) in order to provide potential regionally operated commuter services that might share infrastructure with the HST system. These potential services are not the responsibility of the Authority and not part of the HST system. The MTC's Regional Rail

Plan is identified and described in Chapter 2 as a related project and is included as part of the cumulative impacts analysis (Section 3.17). The analysis and conclusions of the Bay Area Regional Rail Plan were considered in the identification of the Preferred Alternative (Chapter 8). The Authority believes the Preferred Alternative identified in this Final Program EIR/EIS is consistent with the findings of the Regional Rail Plan and the comments submitted by the MTC.

Table 4.3-2 outlines the costs associated with the operation of the High-Speed Train system. Included in those costs is a marketing and reservation cost that would account for ridership development. The Program EIR/EIS defines the proposed project (the HST system). Please refer to the "Purpose and Need" (Chapter 1) and "Project Description" (Chapter 2) in the Program EIR/EIS. The ridership and revenue forecasts include both inter-regional and intra-regional passengers that would use the proposed HST system; see Response to Comment O007-40 for further explanation. O007-47

Chapter 2, "Alternatives," of the Draft Program EIR/EIS provides a comprehensive description of the alignment alternatives and station location options under consideration, refers the reader to appropriate maps and drawings, and explains the identification of alternatives following the selection of the HST system, based on the statewide final program EIR/EIS certified in 2005, which considered modal alternatives. Reference to applicable drawings is appropriate.

Maps of the alternatives described in Table 2.5-1 are available in Chapter 7, and the identification of the preferred alignment is addressed in Chapter 8.

#### **O007-48**

The environmentally superior alternative is identified in Chapter 8 of this Final Program EIR/EIS. Please see Response to Comment Letter F007 discussing the U.S. Environmental Protection Agency's (EPA's) concurrence that the Preferred Alternative identified in this Final Program EIR/EIS is most likely to yield the Least Environmentally Damaging Practicable Alternative (LEDPA).



**O007-49**

See Response to Comment LO007-22.

**O007-50**

The operational planning assumptions used as inputs for the ridership and revenue forecasts were based on well-established HST operational practices.

As acknowledged in the Draft Program EIR/EIS, some HST systems physically separate trainsets (“splitting and joining trains”) at some point on the route. However, the percentage of HST trains actually using this practice worldwide is very small. In France, about 10% of the TGV trainsets are physically split, whereas in Japan the percentage is even smaller. HST trainsets generally are not split during peak hours or at peak traffic points. For example, the TGVs that split in southwest France have already served the major Paris-Bordeaux market, and do not add time to the passengers on this critical city-pair. The Paris-Bordeaux passengers in the other direction also do not lose time waiting for the trains to be combined into one, since they board after consolidation. The mini-Shinkansen that splits to Yamagata does so after the major stations at Fukushima and Sendai. The Thalys HST does not split until after Brussels passengers get off. The HST splits are generally done in places where the traffic demands are low—not on the main trunk line between the major markets.

The Program EIR/EIS notes that it is unlikely that the application of splitting and joining trains would benefit one alignment alternative over the other. Practically, only one such train split could be accomplished for each scheduled train operation. Limited and appropriate splitting of trainsets could be used for either the Altamont Pass or Pacheco Pass alternatives (at Fresno or Los Angeles for example). As stated in the Staff Recommendations (Appendix 8-A), a key operational benefit of the Pacheco Pass is that it minimizes the number of HST network branches and splits.

The HST ridership and revenue forecasts done 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 is not a major factor in differentiating between the Altamont Pass and Pacheco Pass alternatives.

**O007-51**

The ranking of markets noted by the commenter is based on total trips irrespective of travel mode. The commenter correctly notes that trips to, from, and within the Central Valley represent a large portion of the raw market potential for interregional travel in California. However, raw potential market size is but one issue to consider; market capture potential is a more critical issue, with this potential dependent on relative competitiveness of travel options.

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, more than one-third of the trips between the Los Angeles Basin and Bay Area choose HST because it takes approximately the same door-to-door time as air but costs about half as much. 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.

On a statewide basis, Altamont Pass and Pacheco Pass provide similar service levels for trips to, from, and within the Central Valley. The only substantial service-level difference between Altamont and Pacheco is between the Bay Area and Central Valley areas north of Merced; Altamont provides faster travel times in this submarket compared to Pacheco. About two-thirds of all trips between the Bay Area and Central Valley begin or end in the area between Merced and the greater Sacramento region. Even with this large raw market potential, HST is not able to capture a substantial share of the submarket between the Bay Area and northern Central Valley for either Altamont or Pacheco due to the competitive advantage enjoyed by auto travel.

Contrary to the commenter's assertion, ridership between southern California and the Bay Area is not similar for the Altamont Pass and Pacheco Pass alternatives—nor should it be. Ridership differences arise due to differences in travel time, travel cost, and service frequency between individual station pairs for Altamont and Pacheco, as well as HST's competitive position relative to auto and air travel in certain markets. Most notably, the Altamont Pass base alternative includes an HST service split in the East Bay, which greatly reduces HST frequency (compared to Pacheco Pass) to San Jose and San Francisco under the base network alternative. The ridership and revenue forecasts assumed about 50 trains per day per direction between Los Angeles and San Francisco/San Jose in the Pacheco Pass base alternative. Due to the HST service split, the Altamont Pass base alternative has 33 trains per day from Los Angeles to San Francisco and 17 trains per day from Los Angeles to San Jose (for the same total of 50 between Los Angeles and the Bay Area). This allocation of trains to the two destinations means that everyone traveling to these destinations has lower frequency of trains in the base Altamont network alternative (San Francisco and San Jose) compared to the base Pacheco network alternative (San

Francisco and San Jose). This lower frequency contributes to about 6 million fewer annual systemwide passengers in the Altamont Pass base alternative compared to the Pacheco Pass base alternative. The ridership and revenue forecasts accurately represent the effect of this operating assumption.

Although Altamont has the potential to achieve higher ridership between the Bay Area and northern Central Valley (Merced northward), Pacheco achieves higher ridership between the Bay Area and areas from Fresno southward (including Los Angeles and San Diego regions). Due to its proximity to the Central Coast region (through a potential Gilroy station), the Pacheco Pass alternative also creates a sizable HST market to/from the Monterey Bay area; this market is virtually untapped with the Altamont Pass alternative.

The travel times noted in the commenter's footnote (#16) are in-vehicle times between stations. HST's time advantage over auto, and Altamont's time advantage relative to Pacheco, are greatly reduced when comparisons are more accurately made on a door-to-door basis. HST's overall competitive position relative to auto in the Sacramento to Bay Area market is further degraded by higher costs for HST relative to auto and by the fact that the entire Sacramento region is served by one HST station located in Downtown Sacramento. Given these factors, HST's mode share between Sacramento and the Bay Area is about 5.2% for Altamont and 3.6% for Pacheco.

#### **O007-52**

Please see Response to Comment O007-50.

#### **O007-53**

The Authority and FRA disagree with the comment. The ridership and revenue forecasts and underlying methodology used for the Draft Program EIR/EIS are current, transparent and accurate. No revisions are necessary. Please see Response to Comment O007-44 for availability of detailed, transparent information regarding the ridership and revenue model.



**0007-54**

The core drivers of demand for interregional travel in California are the socioeconomic characteristics of Californians and the state's economic and employment picture. The relevant sources of current year data and 2030 socioeconomic projections are:

- Decennial Census data products, specifically the Census Transportation Planning Package (CTPP) and the Summary Tape File (STF) 1;
- Local agency socioeconomic estimates and projections, such as those developed and updated by the Association of Bay Area Governments, Southern California Association of Governments, San Diego Association of Governments, and Sacramento Area Council of Governments; and
- State Department of Finance and Caltrans projections.

To the extent that commercial sources and state employment data are used to develop the local agency socioeconomic estimates and projections, they were included, but these were not evaluated and incorporated separately for this study because there is a desire to remain consistent with current local agency forecasts.

These growth projections were documented in the model validation report that has been posted on the Authority website (at <http://www.cahighspeedrail.ca.gov/ridership/>) throughout the public comment period for the Draft Program EIR/S.

Population and employment growth potentially induced by the HST service was not included in the socioeconomic forecasts used for the ridership and revenue forecasts. A separate analysis of growth-inducement potential was undertaken and fully documented in Section 5.

**0007-55**

For interregional trips, which make up about 75% of total HST trip making, the recreation/other ridership is relatively similar between Pacheco Pass (67% of interregional trips) and Altamont Pass (62% of interregional trips) alternatives. The difference between Pacheco

and Altamont is due primarily to Altamont's ability to attract relatively more business and commute trips than Pacheco at stations between Merced and Sacramento. Compared to Pacheco, Altamont draws 1.5 million more business/commute trips and 0.4 million fewer recreation/other trips. Hence, the percentage differences between Pacheco and Altamont in this regard are due to Altamont's ability to attract relatively more business/commute trips in the northern San Joaquin Valley, not to an inherent ability for Pacheco to attract proportionately more recreation/other trips.

For intraregional trips, there are no substantive differences between Altamont and Pacheco in their ability to attract recreation/other trips in southern California. Within the Bay Area, the Altamont base alternative is projected to attract about 330,000 more annual intraregional trips than the Pacheco base alternative. This total, however, masks larger differences in the composition of the trips: Altamont attracts about 1.5 million more business/commute trips and 1.1 million fewer recreation/other trips than Pacheco.

There is substantial intraregional trip making in the corridor between Santa Clara County and San Francisco. Pacheco's ability to draw more "recreational and other" trips is due primarily to the directness of service that Pacheco provides in the entire Santa Clara County to San Francisco corridor rather than the inclusion of a Gilroy station. The HST would substitute for some Caltrain and auto travel in this corridor across all trip purposes. HST is at a relative disadvantage to Caltrain for commute and business travelers since, during peak commute hours, Caltrain runs at similar frequencies to HST with lower fares and many more stations. However, HST is at a competitive advantage to Caltrain for recreation and other trips since most of these trips occur during off-peak hours; in the off-peak, HST's travel time and frequency advantage outweigh Caltrain's lower cost. Hence, HST would be able to capture recreation and other riders at a higher rate than business and commute riders in the corridor between Santa Clara County and San Francisco.

From a ridership and revenue standpoint, one of the main differences between the base Altamont and Pacheco scenarios involves the splitting of train service between San Jose and San



San Francisco in the Altamont scenario. This split eliminates a direct HST connection between San Jose and San Francisco and significantly reduces the frequency of train service to either destination. The effects of an Altamont operational split are not obvious for business and commute travelers since, during peak commute hours, HST would provide high frequency service to both San Jose and San Francisco and the alternative transit options (BART to San Francisco and ACE to San Jose) provide substantially slower travel times. The effects are much more obvious for recreation and other travelers because:

- Overall HST frequencies would be lower during off-peak hours when most recreation and other trips occur. With the operational split, frequencies would be further reduced to San Jose and San Francisco, putting HST at a strong disadvantage to the auto for recreation and other trips.
- In spite of its slower travel time, BART is a relatively more attractive transit option for recreation and other travelers between the East Bay and San Francisco due to its lower cost and much higher off-peak frequency.
- The loss of direct service between Santa Clara County and San Francisco means that HST is capturing very few recreation/other trips in this corridor.

Hence, the base Altamont scenario is able to capture business and commute riders at a much higher rate than recreation and other riders for trips to and from the East Bay.

Full documentation of the methodology used to obtain projected ridership has been completely documented in a series of technical reports, which are posted on the Authority website at <http://www.cahighspeedrail.ca.gov/ridership/>. These reports have been available at this location throughout the public comment period for the Draft Program EIR/EIS.

The underlying source of the intraregional travel market definitions for the Bay Area used in the HST study was developed by the MTC and is documented on their website:

[http://www.mtc.ca.gov/maps\\_and\\_data/datamart/forecast/](http://www.mtc.ca.gov/maps_and_data/datamart/forecast/).

These forecasts are used by the MTC for planning purposes and are validated using available observed data sources. These validation reports are also provided on the MTC website.

**0007-56**

All of the information requested by the commenter was available during the Program EIR/EIS circulation period in Appendix A of the “Ridership and Revenue Forecasts” report (Draft Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study, Ridership and Revenue Forecasts, Cambridge Systematics, 2007) described by the commenter and posted to the Authority’s website. The information requested by the commenter is further provided in the tables below.

**Station Boardings for Base Pacheco Alternative (P1)**

Station Name	Annual Boardings	Percent Intraregional	Percent Interregional
San Francisco – Transbay	11,699,200	12	88
Millbrae	1,180,700	52	48
Redwood City	2,014,000	28	72
San Jose	5,338,000	25	75
Morgan Hill	363,000	74	26
Gilroy	1,767,000	11	89
Sacramento	7,019,000	0	100
Stockton	1,711,000	0	100
Modesto Briggsmore	1,290,000	0	100
Merced	641,000	0	100
Fresno	2,573,000	0	100
Bakersfield	3,210,800	0	100
Palmdale	4,355,500	46	54
Sylmar	5,681,200	38	62
Burbank	1,698,900	43	57
LA – Union Station	8,125,200	36	64
Norwalk	590,100	71	29



Station Name	Annual Boardings	Percent Intra-regional	Percent Inter-regional
Anaheim	3,102,600	35	65
Irvine	2,926,700	41	59
City of Industry	3,619,600	61	39
Ontario	3,584,700	52	48
Riverside	6,012,700	39	61
Temecula	3,075,300	42	58
Escondido	3,382,800	4	96
University City	2,279,800	4	96
San Diego	6,649,500	3	97
<b>Total Ridership</b>	<b>93,890,000</b>	<b>25</b>	<b>75</b>

**HST Station Boardings for Base Altamont Alternative (A1)**

Station Name	Annual Boardings	Percent Intra-regional	Percent Inter-regional
San Francisco – Transbay	8,642,500	14	86
Millbrae	1,070,600	56	44
Redwood City	1,229,900	42	58
Warm Springs	474,000	63	37
San Jose	3,052,300	41	59
Bernal	4,042,400	16	84
Sacramento	7,653,200	0	100
Stockton	1,251,800	0	100
Tracy Downtown	818,000	0	100
Modesto Downtown	1,618,000	0	100
Merced	683,300	0	100
Fresno	2,573,000	0	100
Bakersfield	2,797,000	0	100
Palmdale	4,025,100	50	50
Sylmar	5,279,800	40	60
Burbank	1,633,600	44	56
LA – Union Station	7,700,800	38	62
Norwalk	538,000	77	23
Anaheim	2,958,100	37	63

Irvine	2,771,600	43	57
City of Industry	3,483,900	63	37
Ontario	3,403,400	54	46
Riverside	5,610,600	42	58
Temecula	2,884,400	45	55
Escondido	3,224,000	5	95
University City	2,158,400	5	95
San Diego	6,336,800	3	97
<b>Total Ridership</b>	<b>87,910,000</b>	<b>27</b>	<b>73</b>

**0007-57**

The Draft Program EIR/EIS discussed the Bay Area Regional Rail Plan that was under development when the Draft Program EIR/EIS was released. Please see Standard Response 3 regarding the consideration of regional rail service in evaluating the network alternatives. The Authority has carefully considered how best to capture riders from interregional travel and long-distance commuters. The HST service is most competitive in the 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 model; and
- Equivalent door-to-door travel times and frequencies as the more expensive air mode.

A competitive service for long-distance commuters requires more frequent station stops so that travel times for the commuters from the origin to the ultimate destination is competitive with the automobile.

A system with HSTs that includes a commuter-oriented overlay service would require more closely spaced stations and two additional express tracks so that HSTs could pass through the stations without stopping, as would be the case for the Caltrain Corridor. Without these express tracks, HST travel times would be



compromised and the ability to capture interregional passengers would be reduced.

In short, a combined HST and commuter rail overlay in the Altamont Corridor would involve more stations, each with four tracks. Additionally, the Altamont alignment requires provision for two freight tracks, so six tracks would need to be provided for the Altamont stations and station areas. The transition from two to four HST tracks requires some distance on either side of the stations, and for very closely spaced stations, this transition would not occur (i.e., there would be four tracks between the stations). Please also see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative and Chapter 8 of this Final Program EIR/EIS and Response to Comment O007-46.

#### O007-58

In Table 7.2-8 of the Draft Program EIR/EIS it is noted as part of the constructability analysis that:

*Constructing a new bridge crossing along the Dumbarton corridor would involve major construction activities in sensitive wetlands, saltwater marshes, and aquatic habitat. Special construction methods and mitigations would be required.*

Given that this is a program-level document, this acknowledgement that a bridge would require “special construction methods and mitigations” is sufficient. Please also see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative and Chapter 8 of this Final Program EIR/EIS.

#### O007-59

For the reasons stated in Response to Comment O007-22, it is not feasible to use the Dumbarton rail bridge for the HST system. However, the Authority recognizes that increased and enhanced conventional rail service could benefit greatly from the access to the midpeninsula that a rehabilitated Dumbarton bridge would provide.

#### O007-60

The Draft Program EIR/EIS provided station information and associated analysis of impacts as is currently available. Station location options for each of the alignment alternatives are provided in Chapter 2 (Table 2.5-3). Station fact sheets are provided in Appendix 2-F, including concept drawings. Further review of station concepts and configurations will be provided in Tier 2 project-level environmental documents, when more detailed engineering and design information is available for the HST system. Traffic, transit, circulation, and parking impacts of the stations are described in Chapter 3, Section 3.1. Individual streets examined in this section are illustrated by the screenline diagrams in Appendix 3.1-A, Station Location Street Maps. Construction impacts are evaluated in Section 3.18. Growth inducement associated with the stations is reviewed in Section 5.5.

#### O007-61

The Authority and FRA find that the Draft Program EIR/EIS provides consistent and complete information regarding the description of and impacts associated with multiple HST alignments and station location options in the Bay Area to Central Valley. Please see Standard Responses 1 and 2.

As noted in Table 2.5-4, the primary reasons for elimination of the Los Banos Station are revenue/ridership and environmental factors. Environmental factors listed in this table include “Water resources, threatened and endangered species, growth related impacts” (page 2-44). Appendix 2-G, “Alignment Alternatives and Station Location Options Eliminated from Further Consideration,” states the following regarding the elimination of the Los Banos Station:

*Los Banos: A HST station location option at Los Banos (Western Merced County) would have low intercity ridership, 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 alternative with a potential station location option at Los Banos, considerable public and agency opposition has been expressed about this station location option because of its perceived potential to result in*



*growth related impacts. This station location option (as well as the Visalia/Hanford station location option) has low ridership potential compared to other potential station location options investigated by the Authority. In 2020, this station location option is forecast to serve a population of only about 88,000 (forecast to only have between 155,000 and 190,000 annual total intercity boardings and alightings by 2020). This station location option would have poor connectivity and accessibility and, with potential for environmental impacts, would not meet the basic program objectives. (Page 2-G-8)*

This Final Program EIR/EIS has no Los Banos station, and the Authority has reiterated and expanded its commitment that there will be no station and no maintenance facility between Gilroy and Merced. See Chapter 8.6.2 of this Final Program EIR/EIS regarding further mitigation to avoid potential HST impacts. See also Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA.

As noted in Chapter 2, "Alternatives," "Conceptual designs are based on engineering criteria (California High-Speed Rail Authority and Federal Railroad Administration 2004)" (page 2-38). These criteria have been and are available for public review on the Authority's website and at the Authority's offices.

The environmentally superior alternative is identified in this Final Program EIR/EIS in the Summary and in Chapter 8. CEQA does not require, nor does the Authority believe that it would be appropriate to identify an environmentally superior alternative for both Altamont and Pacheco alternatives. Rather, the Authority and FRA have identified the environmentally superior alternative from among all alternatives for both Pacheco and Altamont Passes. Please see Response to Comment O007-22 regarding the Dumbarton Bridge.

#### **O007-62**

The development of potential freight service on the HST system is not proposed as part of this project; therefore, it would be both beyond the scope of this analysis and speculative. It may or may not be proposed during future HST system implementation.

#### **O007-63**

The Authority and FRA acknowledged that regional and local governments could be funding partners for commuter improvements in the ACE corridor. Please refer to the description of findings from MTC's Regional Rail plan provided in Section 3.17. It must be noted that commuter services such as ACE typically operate at a revenue deficit. Please refer to Standard Response 3 in regards to the identification of the Pacheco Pass as the Preferred Alternative.

#### **O007-64**

Please see Standard Response 1, 2, and 3, as well as Response to Comment O006-3.

The Authority and FRA disagree that recirculation of the Draft Program EIR/EIS is necessary.

#### **O007-65**

Please see Response to Comment O007-37 and Standard Response 2.

#### **O007-66**

Please see Standard Response 5 regarding mitigation strategies.

#### **O007-67**

Please see Standard Response 5 and Responses to Comments L029-61, O007-25, O007-28, O007-37, and O007-61.

#### **O007-68**

Please see Standard Responses 2 and 5, as well as Response to Comment O007-67.

#### **O007-69**

Impact analyses throughout the Draft Program EIR/EIS appropriately take into account both current and future conditions.

The alternative alignments are shown on current aerial photography. In some cases, current conditions formed the basis for the analysis,



given that these conditions are not likely to change in the future. These include geology and soils, hydrology and water resources. In other cases, current conditions were used for analysis, given that future conditions are not easily foreseeable. These include hazardous, agricultural, water resources, EMF, visual setting, public utilities, cultural/ paleontology, and 4(f) and 6(f) resources. Where appropriate, current conditions are used as the baseline and future (2030) conditions are evaluated based on existing plans, programs, and current projections. These include traffic and parking, land use, energy, air quality and air emissions, biological resources and wetland, and travel conditions (ridership).

#### **O007-70**

The Authority and the FRA disagree with this comment. Comparisons to existing traffic conditions are provided. Because of expected background growth in traffic, horizon year comparisons between build and no build conditions are typically more relevant for determining potential project effects.

Please see Response to Comment O007-69. The Draft Program EIR/EIS provides information regarding current (2005) V/C ratios and levels of service (LOS) and anticipated changes between 2005 and 2030.

The HST system was not evaluated as if it exists on the ground today. Given that such a condition cannot exist, this is not a reasonable alternative.

#### **O007-71**

Please see Response to Comments O007-69 and O007-70.

#### **O007-72**

Please see Response to Comments O007-69 and O007-70.

#### **O007-73**

The Authority and FRA disagree that recirculation of the Draft Program EIR/EIS is necessary. Far from confusing or obscuring true impacts, the approach applied in the Draft Program EIR/EIS provides

an appropriate evaluation of the impacts. Please see Response to Comments O007-69 and O007-70.

The Authority and FRA disagree that the approach used in the Draft Program EIR/EIS would likely understate the impacts. Congestion levels on the regions roadways will typically increase between 2005 and 2030, so traffic impacts from associated with the HST project should appropriately be evaluated with these more congested roadways. The impacts will be more severe, requiring more mitigation.

In addition, the approach taken in the Program EIR/EIS takes into account population growth that will occur in the Bay Area to Central Valley region and in the state. Ridership levels are based on this assumed growth, and these ridership projections form the basis for the parking demand and traffic that would be generated at the HST stations, thus leading to the identification of true levels of impact.

#### **O007-74**

Please see Response to Comment O007-73. The increase in traffic from the HST system has been compared against the true traffic load and capacity that would exist when the HST system is developed and operating – not against the lower traffic levels present today. Moreover, the traffic generated by the HST stations is based on ridership projections that appropriately assume projected population growth in the Bay Area to Central Valley and in the state.

#### **O007-75**

The comment asks for overly detailed analysis of unforeseeable growth that would be speculative and inappropriate for this programmatic analysis. Please see Standard Responses 1 and 2, as well as Standard Response 4 and Chapter 5.

The analysis of direct transportation impacts in Section 3.1, indirect transportation impacts in Section 5.4.1, and cumulative transportation impacts in Section 3.17.4 demonstrate that no transportation system needs would be “induced ...if HST is introduced and in turn induces new growth.”



**O007-76**

Because traffic saturation leads to long peak periods on the intercity highways, as described in Table 3.1-2, the results of using an individual peak hour would yield very similar results to that of using the total peak periods. Also see Response to Comment O007-73.

Please see Response to Comments O007-69 through O007-75.

**O007-77**

The No Project alternative does not include facilities of the proposed HST project. The referenced text is describing a dynamic transportation environment responding to projected demographic growth. Please see page 3.1-24, Section 3.1.3, Environmental Consequences. This section explains, in detail, the differences between existing conditions and the No Project Alternative. Although the No Project Alternative analyzed some of the existing stations that would also act as HST stations, this alternative does not take into account the new HST stations as the HST alternative has been treated and analyzed independently.

The new infrastructure referred to in this text is at existing stations and does not include the HST project. The text appropriately states that travel demand on the local roads surrounding the station location options would increase, absent the HST project. Please see Responses to Comments O007-69 through O007-75.

**O007-78**

Because there will be no station between Gilroy and Merced, and because the HST tracks would not attract development, the HST would not induce growth in the Pacheco area as the comment describes. Please see Standard Response 3 and Response to Comment O007-75.

Please see Section 5.4.1 for a discussion of the indirect transportation impacts associated with induced growth.

Either of the HST alignments, Pacheco or Altamont, would REDUCE pressure for a highway and associated infrastructure through the Diablo Range. The most pressure would arise under the No Project

Alternative. Table 3.1-2 in the Program EIR/EIS shows that year 2030 peak-period traffic volumes across the Diablo Range (SR-152 and I-580) would be reduced by 6,937 for the Pacheco Pass alternative and 6,566 for the Altamont Pass alternative. These reductions represent about 5% of peak period traffic across the Diablo Range.

Further, Table 5.3-5 shows that the Pacheco alternative could induce up to 1.2% population growth in the northern Central Valley (Sacramento County to Fresno County), while the Altamont HST alternative could induce up to 1.9% population growth in that area. This growth inducement (1.2 to 1.9%) is less than the reduction in auto travel due to modal diversion, indicating that either HST alternative will result in less traffic over the Diablo Range than the No Project Alternative.

The net conclusion is that HST would reduce the pressure for a new highway and associated infrastructure across the Diablo Range, and Pacheco would result in a greater reduction than Altamont.

**O007-79**

The comment asks for more specific information than is known or reasonable to expect at the program level of analysis. Please see Standard Responses 1 and 2.

A review of detailed construction impacts and haul routes at the program level is neither practical (in terms of the extensive time and effort) nor necessary. Identification of the Preferred Alternative, including station locations, enables a detailed evaluation of construction impacts for both the alignment and station locations (e.g., identification of construction haul routes and trips). Such an approach is consistent with typical project planning and environmental review requirements.

Please see Response to Comment O007-62 regarding HST freight. Please also see Response to Comments O007-69 through O007-77 regarding treatment of current conditions and the No Project Alternative. See also Response to Comment O007-74 regarding traffic impact analyses.



Information on ridership on the different modes has been presented in summary, comparative fashion in the Program EIR/EIS, especially Sections 1.2.2, 2.3.3(C), 3.1.2, and 7.2. More detailed results have been completely documented in a series of technical reports that are posted on the Authority's web site at <http://www.cahighspeedrail.ca.gov/ridership/>.

The catchment areas are an output of the ridership and revenue model, not an input assumption. Hence, "consistent assumptions concerning catchment areas" do not exist, nor should they exist. Station catchment areas are very dynamic and are a function of the alignment and station location options included in a particular HST alternative, as well as the relative travel time and cost among the different travel options available in each travel market.

#### **O007-80**

The comment asks for overly detailed analysis of unforeseeable transportation improvements that would be speculative and inappropriate for this programmatic analysis. Please see Standard Responses 1 and 2.

The potential for the HST system to induce the need for future transportation system improvements was addressed in Section 5.4.1. Please see Response to Comment O007-78. Access and egress to the HST system can be provided by the existing, planned, and programmed transportation system that is part of the No Project Alternative.

#### **O007-81**

The comment asks for overly detailed analysis of unforeseeable transit improvements that would be speculative and inappropriate for this programmatic analysis. Please see Standard Responses 1 and 2.

As discussed in the Draft Program EIR/EIS, connectivity was a key consideration in station location. Table 3.1-4 identifies connecting transit services at HST stations. The tables in Chapter 7 also summarize transit connectivity for the network alternatives. The existence of the publicly owned Caltrain Corridor and the ability to

provide a four-track system in this corridor, with impacts that are less than other new or expanded corridors, was among the reasons for identification of the Pacheco Pass /Caltrain Corridor as the Preferred Alternative. Please also see Standard Response 3. Please see Response to Comments L025-3 and L025-5 regarding complementary commuter and HST service along the Caltrain Corridor. Please also see letter L026 from SamTrans, Caltrain, and San Mateo County Transportation Authority in support of the Pacheco Pass/Caltrain Corridor alternative.

It is acknowledged that an Altamont alternative crossing the San Francisco Bay and heading into San Francisco would not require use of the Caltrain Corridor south of Dumbarton nor would it result in the associated impacts. The identification of the Preferred Alternative took these reduced impacts into account but also acknowledged that other impacts that would occur for this alternative, for instance impacts on the San Francisco Bay. Please see Chapter 8 of this Final Program EIR/EIS.

Please also see Response to Comment O007-46.

The Transbay Transit Center is currently reviewing the appropriate and most effective mix of peak-hour HST and commuter trains, and the Authority will participate in this discussion during the preliminary engineering and project-level environmental review. Please also see Response to Comment L030-3.

The Authority and the FRA disagree with the comment that the described design of the two-level, eight-track HST San Jose Diridon station is "implausible." The City of San Jose has already undertaken planning studies for such a station.

The multiple transit providers at the Diridon station—Caltrain, Capitol Corridor, ACE, AMTRAK, light rail, the proposed BART extension, and bus and shuttle services—and the extensive connectivity that this provides are among the reasons that Pacheco Pass/Caltrain Corridor is identified as the Preferred Alternative.



**O007-82**

Please see Standard Response 5. During preliminary engineering and the project-level environmental review phase, the Authority and FRA will not only review mitigation of potential adverse impacts on transit, but also the opportunities to enhance connections between the HST system and these transit providers. The Authority and FRA note that construction impacts on transit systems would be temporary, while the HST system would be ultimately beneficial and complementary.

**O007-83**

Please see Standard Response 5 regarding mitigation strategies, as well as Response to Comments L029-61, O007-25, O007-28, O007-37, O007-61, and O007-67. A number of detailed cost-effective mitigation measures that are consistent with the overall mitigation strategies identified in this Program EIR/EIS will be possible. Given the level of conceptual engineering and the sheer number of alignment alternatives and station location options under review in this Program EIR/EIS, development of detailed mitigation measures for possible options and combinations is neither achievable nor practical.

Detailed mitigation measures, including the exact location and design, consistent with the mitigation strategies in this Program EIR/EIS, will be identified during the preliminary engineering and project level environmental review phase, and the right-of-way required and associated impacts can be determined in detail at that point. Even though impacts associated with these detailed measures will likely fall within the overall envelope of impacts identified in this Program EIR/EIS, the impacts associated with the detailed measures will be fully reviewed and disclosed in the project-level environmental review.

Right-of-way costs have been included for the conceptual alignments (Chapter 4). Detailed right-of-way maps are unnecessary and impractical at this program level.

**O007-84**

Please see Standard Response 5. The commenter states that the Draft Program EIR/EIS “concludes that all potentially significant traffic and circulation impacts of the HST alternative will be reduced to less than significant with mitigation.” This statement is not what is stated in the Draft Program EIR/EIS. Specifically, Section 3.1.5, Mitigation Strategies and CEQA Significance Effects, states:

*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 for 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. This document therefore concludes that 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 co-lead agencies will work closely with local government agencies at the project level to implement mitigation strategies. (page 3.1-38, emphasis added)*

**O007-85**

Please see Response to Comments O007-69 through O007-77 regarding treatment of current conditions and the No Project Alternative.

**O007-86**

The Authority and FRA disagree with the contentions that the air quality methodology used in the analysis is faulty and the air quality analysis is inadequate. The air quality methodology is consistent



with the other environmental methodologies in the EIR/EIS, which were developed with input from the appropriate regulatory agencies. The potential effects are compared between the existing conditions and the no-build alternative, and then the no-build alternative is compared to the HST alternatives.

**O007-87**

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 (equivalent to a 25% reduction) and for an 80% reduction in GHG emissions to below 1990 levels by 2050. Assembly Bill 32, enacted in 2006, calls for the California Air Resources Board to adopt regulations to help achieve these emission-reduction goals. See discussion of GHG issues in Section 3.3, Air Quality, of this Final Program EIR/EIS.

The effect of the HST system on emissions of CO<sub>2</sub> was calculated and presented in the Draft Program EIR/EIS. 2005 statewide CO<sub>2</sub> levels have been quantified and were estimated at 1.280 million tons per day (California Energy Commission). The air quality analysis identified a reduction of about 17.6 billion pounds of CO<sub>2</sub> emissions annually by 2030 attributed to the proposed HST project. The proposed HST project is shown to have net beneficial impacts related to climate change. Any additional carbon entering the atmosphere, whether by emissions from the project itself or removal of carbon sequestering plants (including agricultural crops), would be more than offset by the beneficial reduction of carbon resulting from the project due to a reduction in automobile VMT (mobile sources) and reduction in the number of airplane trips.

**O007-88**

Please see Standard Response 5 and mitigation strategies listed in Chapter 3.3 of the Final EIR/EIS. CEQA requires that feasible mitigation be identified where significant adverse impacts have been identified. Mitigation measures are not required for effects which are not found to be significant (CEQA §15126.4 [a]). As noted previously, the proposed HST project is shown to have net beneficial

impacts related to climate change. Where beneficial impacts have been identified, mitigation measures are not required. Benefits of the proposed HST system would include reduced vehicle trips, reduced VMT and multi-modal HST stations. Increased energy efficiency for HST facilities, increased recycling, and use of green building technology are all measures that can appropriately be considered in the future during project-level environmental reviews, when more detailed system design and location information will be available.

**O007-89**

As noted in Response to Comments O007-87 and O007-88, the proposed HST project is shown to have net beneficial impacts related to climate change. Where beneficial impacts have been identified, mitigation measures are not required.

**O007-90**

Please see Response to Comments O007-87 and O007-88. The Final EIR/EIS includes an expanded discussion of global climate change, including a revised setting discussion, and emissions inventories for the 2005 existing condition, the 2030 No Project Alternative, and proposed HST project alternative. In addition, the Authority is investigating the feasibility of having the HST system be powered by energy sources with zero emissions, but this is not required as a mitigation measure.

**O007-91**

The Authority agrees that, while not required, creating a carbon neutral HST system is an appropriate goal for the HST. The Authority will examine its feasibility at the project-level analysis. Also see Response to Comment O007-90.

**O007-92**

See Standard Response 5.



**0007-93**

The Authority and FRA do not agree that the approach to analyzing impacts on agricultural land is flawed. Please see Standard Response 2. The analysis of all the alternatives identified impacts when compared to the existing (baseline) condition. As stated in the Program EIR/EIS, because it is not possible to identify or quantify the amount of farmland that might be affected by future transportation projects, no quantified impacts were identified for the No Project Alternative. HST alternatives were therefore compared to the existing (baseline) condition.

The Program EIR/EIS recognizes that there would likely be significant impacts from severance. Analyzing severance impacts requires a level of specificity that will be available as the design progresses and will be analyzed as part of the Tier 2, project-level environmental analysis. Assuming that severed lands would be converted to nonagricultural use is speculative at this time, as are potential impacts on agricultural infrastructure and other indirect effects.

Growth inducement is discussed in Chapter 5. An HST trackway does not lend itself to inducing growth in unpopulated areas, such as along the Pacheco Pass alignment, especially along Henry Miller Road. Please also see Standard Response 4.

The direct impacts on agricultural land that were addressed include acquisition of this land. These acres were quantified in Section 3.8 and Chapter 7. The cost of acquiring land was discussed in Chapter 4. Because the HST would generally follow existing transportation corridors, it would tend to result in acquisition of farmland at existing parcel edges, where right of way is needed, thereby reducing severance and other impacts. However, it is likely that some severance impacts would be significant. These and other impacts will be further analyzed in the Tier 2, project-level environmental analysis.

Impacts on specific types of farmland outside of those categorized on available farmland mapping were not addressed in this program document. However, because the HST system generally follows

existing transportation corridors, impacts on grazing uses would be limited.

The project does not include residential development and the only potential for growth inducement would be around station locations, which are located in existing developed areas. Chapter 5 addresses the potential growth-inducing impacts of a faster mode of transportation (HST). Please see Standard Response 4 regarding growth.

The identification of the preferred network alternative was based on many factors including in some cases, off-setting or competing impacts. It was not based on the potential for agricultural impacts alone. Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.

The mitigation strategies will be refined in the Tier 2 project-level environmental document. If agricultural easements are identified as a mitigation measure, the timing of these easements will also be identified. In general mitigation intended to avoid or offset impacts is timed to occur before the impact or contemporaneously with the impact. Local land use planning authority resides primarily with local government agencies. The Authority does not have the power to set urban growth boundaries or establish smart growth zoning in individual jurisdictions but has established principles to guide station area planning that are consistent with state "smart growth" goals. See Chapter 6 and Chapter 8, Section 8.6.2.A, and Standard Response 5 regarding mitigation strategies.

The Program EIR/EIS did not state that farmland impacts could be reduced to less than significant even with the mitigation strategies implemented. More specific findings will be determined at the Tier 2 project-level environmental analysis.

**0007-94**

The Authority and FRA consider the information adequate for the decisions to be made and to meet CEQA and NEPA requirements. Section 3.15 discloses the direct and indirect impacts on biological



resources and wetlands. Section 3.17 discusses the cumulative impacts. See Standard Responses 1 and 2.

#### **0007-95**

Please see Standard Responses 2 and 3. Extensive biological resources and wetlands data and information were collected and analyzed and are presented in a comprehensive and uniform manner for the alignment alternatives and station location options. Chapter 3, "Affected Environment, Environmental Consequences, and Mitigation Strategies", Section 3.0.1, "Purpose and Content of This Chapter," of the Draft Program EIR/EIS states:

*The program EIR/EIS analyzed the potential environmental impacts, including biological resources and wetlands, of the HST alignment alternatives and stations equally. Impacts on resources resulting from both the Altamont Pass and Pacheco Pass alignment alternatives and stations were analyzed consistently and are documented in the program EIR/EIS.*

#### **0007-96**

See Standard Responses 1, 2, and 5 regarding the programmatic decision, nature of a programmatic analysis, and the role of mitigation strategies. See also Response to Comment 0007-34.

The data for biological resources and wetlands were interpreted and synthesized to the appropriate level for a program-level environmental analysis. Further interpretation and qualifiers, including quality and regional importance, will be developed as part of the Tier 2 project-level environmental analysis, following detailed surveys and habitat assessments.

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. As noted above, 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. Refer to Response to Comment 0007-95 regarding the biological analysis. Section 3.17 includes a cumulative biological resources impact assessment. Section 3.15 recognizes the potential impact that the HST may have on wildlife movement and sets forth mitigation strategies to minimize this impact, such as, include design features such as wildlife underpasses, bridges, and/or large culverts, to facilitate known wildlife movement corridors; ensure that wildlife crossings are of a design, shape, and size to be sufficiently attractive to encourage wildlife use; provide appropriate vegetation to wildlife overcrossings and undercrossings to afford cover and other species requirements; establish functional corridors to provide connectivity to protected land zoned for uses that provide wildlife permeability; design protective measures for wildlife movement corridors in consultation with resource agencies; and use aerial structures or tunnels to allow for unhindered crossing by wildlife.

#### **0007-97**

Additional information on wildlife movement linkages was added to Figure 3.15-3 in this Final Program EIR/EIS from the draft Santa Clara County Habitat Conservation Plan. It should also be noted that many of the wildlife movement corridors are along drainages. The HST would be elevated over drainages, which would minimize impacts on wildlife movement corridors. When field surveys are conducted as part of the Tier 2, project-level analysis, specific biological values and ecosystem functions will be assessed, habitat connectivity and other wildlife movement corridors will be identified, specific impacts on biological resources and wetlands will be analyzed, and detailed mitigation measures building off the strategies proposed in Section 3.15.5 will be identified. See also Standard Responses 2 and 5 regarding the nature of a programmatic analysis and the role of mitigation strategies.



**O007-98**

The specific functions and values of wetlands potentially affected by the HST alignment alternatives will be determined as part of a subsequent Tier 2, project-level environmental evaluation when detailed wetland delineations are conducted and impact areas for direct and indirect effects are identified in more detail. At the time that project-level analysis is being conducted, a survey of the availability of replacement wetlands will also be conducted. The Authority and FRA will continue to work with the resource agencies and others to identify wetlands mitigation. As noted in Section 3.15.5, mitigation strategies include onsite or offsite restoration, creation, or enhancement; mitigation banking; or in-lieu fee payments. The USACE typically favors the use of approved mitigation banks or in-lieu fee programs in cases where they result in more regional or watershed benefit than onsite compensatory mitigation.

**O007-99**

Section 3.15.2 provides information on the U.S. Fish and Wildlife Service Grasslands Wildlife Management Area, The Nature Conservancy lands including the Mount Hamilton Project, East Bay Regional Park District lands, CDFG-owned/managed lands, as well as other conservation lands. The impacts on these lands are discussed in Section 3.15.3, and such impacts will be analyzed in further detail in future project-level environmental documents addressing the selected alternative or alternatives.

**O007-100**

The Authority and FRA disagree with this comment. The Draft Program EIR/EIS adequately characterized biological resources potentially affected by the HST alternatives, and, to better convey the information, an additional figure, Figure 3.15-4, Public Lands – San Jose to Central Valley Corridor, has been added in this Final Program EIR/EIS to show urban areas, roads, and publicly owned/managed lands. This figure, in addition to Figures 3.15-1 through 3.15-3, as well as other figures throughout the Program EIR/EIS, shows information that characterizes the resources within

the project study area. This is discussed on page 3.15-11 of the Draft EIR/EIS, and an additional sentence was added in this Final Program EIR/EIS stating that no field surveys to identify species were conducted at the program level.

**O007-101**

Each of the HST alignment alternatives and station location options is evaluated at a consistent level of detail in Section 3.15. Quantification of impacts of projects and programs included in the No Project Alternative was not provided for this document because location information is known for only some of the projects and programs out to 2030. For others, no alignment or other physical locations have been identified. Therefore, any quantification estimate would represent only a partial magnitude of the potential impacts, and reporting this would be confusing and misleading. Each project-level Tier 2 EIR/EIS will evaluate site-specific HST project alternatives and a related No Project Alternative that will be further refined with the information known at that time.

Please see Standard Response 2 and Response to Comment O007-96 regarding level of analysis. Additional information on wildlife corridors and linkages has been added to Section 3.15 in this Final Program EIR/EIS. Additional detail related to species identified, habitats, and wildlife corridors is contained in Appendices 3.15-A through 3.15-N. Further interpretation and qualifiers, including relative values, functions, and regional importance, will be developed as part of the Tier 2 project-level environmental analysis following detailed surveys and habitat assessments. The discussion of the network alternatives in Chapter 7 takes into consideration the impacts of alignments and stations identified in Chapter 3 that, when added together, constitute a network alternative.

**O007-102**

The direct and indirect impacts on the grasslands vegetation community, including the San Jose to Central Valley corridor, was identified in Section 3.15.3 of the Draft Program EIR/EIS. Appendices 3.15-A-1 and 3.15-A-7 identify habitats, including



grasslands, where sensitive species may occur. Impacts on species that may occur in grassland habitat are also discussed in Section 3.15, including the San Joaquin kit fox. It should be noted that San Joaquin kit foxes occur in a variety of habitats, including grasslands, scrublands, vernal pool areas, alkali meadows and playas, and an agricultural matrix of row crops, irrigated pastures, orchards, vineyards, and grazed annual grasslands (U.S. Fish and Wildlife Service 1998). Mitigation strategies are discussed in Section 3.15.5 and include biological resources management plans (BRMP). BRMPs will specify the design and implementation of biological resource mitigation measures, including habitat replacement and revegetation, protection during construction, performance (growth) standards, maintenance criteria, and monitoring requirements. The primary goal of a BRMP is to ensure the long-term perpetuation of the existing diversity of habitats in the project area and adjacent urban interface zones. Specific to habitats, including grasslands, BRMPs will contain, among other things, specific measures for the protection of sensitive amphibian, mammal, bird, and plant species during construction; identification and quantification of habitats to be removed, along with the locations where these habitats are to be restored or relocated; and procedures for vegetation analyses of adjacent protected habitats that will be used to determine the requirements of the revegetation areas.

To avoid impacts from building access roads, construction in sensitive areas (as defined at the project level) would use in-line construction (i.e., use new rail infrastructure as it is built) to transport equipment to/from the construction site and to transport excavated material away from the construction to appropriate reuse or disposal sites. See discussion of construction methods and impacts in Section 3.18, and Response to Comment L029-29

Cumulative biological impacts are discussed in Section 3.17 and growth inducement is discussed in Chapter 5. See also Standard Response 4. The HST trackway itself would not induce growth, especially in relatively undeveloped areas along the Pacheco Pass corridor. Station location options have been placed within urban

areas in the San Jose to Central Valley corridor, including San Jose, Morgan Hill, and Gilroy.

#### **O007-103**

Impacts on parks and wildlife refuges are discussed in Section 3.16, Section 4(f) and 6(f) in more detail. Some parks and recreation areas, depending on uses, can provide functional biological open space. Where this occurs, those are discussed in Section 3.15 under the heading Special Management Areas. Potential impacts on these lands and conservation areas are also discussed in Section 3.15. Design practices have been included in the alignment alternatives to minimize potential impacts on these lands, including the use of tunnels through much of the Diablo Range and in the East Bay under parks and conservation areas and elevated structures through a large portion of the GEA. Additional engineering design refinements will be undertaken to avoid and/or minimize environmental impacts on these resources as part of the Tier 2 project-level environmental analysis.

It would be very unlikely that growth-inducing impacts would occur within special management areas (parks, refuges, or conservation areas) since the management agency or entity would be required to approve any development. Specific impacts on special management areas will be further identified as part of the Tier 2 project-level environmental analysis once additional design details are known. Refer to Response to Comment Letters S006, California Department of Fish and Game, and L029, Grassland Water District. Also refer to Response to Comment F002-10 regarding the kit fox. Detailed noise and vibration studies as they relate to biological resources will be required and conducted as part of the Tier 2 project-level environmental analysis.

#### **O007-104**

Please see Standard Response 5 regarding mitigation strategies. Section 3.15 does not purport that the mitigation strategies identified would fully mitigate significant impacts at the program level. It concludes that impacts on biological resources would



remain significant, even with the application of mitigation strategies. Additional environmental assessment at the Tier 2 project-level will allow a more precise evaluation of the effectiveness of mitigation measures, which will also be further refined at the Tier 2 project level.

#### 0007-105

The Authority and FRA do not agree that the cumulative impacts assessment for biological resources presented in the Draft EIR/EIS is deficient. Revision of the Draft Program EIR/EIS and recirculation are not necessary. The cumulative impacts analysis for biological resources and wetlands discussed in Section 3.17.4, subsection N, indicates that under the No Project Alternative, the cumulative impact related to biological resources and wetlands would be significant when considering past, present, and reasonably foreseeable future projects in the study area. The Program EIR/EIS also states that the HST network alternatives would result in a considerable contribution to a significant cumulative impact on biological resources and wetlands when considering past, present, and reasonably foreseeable future projects in the study area.

The direct and indirect impacts of the HST network alternatives are discussed in Section 3.17, subsection N. There is not enough specific information about the proposed network alternatives or many of the projects included in the cumulative impact analysis to provide a discussion of the issues in this comment at a more detailed level in this program-level document. Each of these issues as they relate to a particular section of the HST System will be further reviewed as part of a subsequent Tier 2 project-level analysis, when more detailed engineering, design and location information will be available, along with variations in alignments to further reduce and avoid impacts.

#### 0007-106

Please see Standard Response 2 regarding the level of detail. Please see Section 3.7.1, Land Use Compatibility, which states:

*Future land use compatibility is based on information from general plans and other regional and local transportation planning documents. These documents were examined to assess an alignment alternative's potential consistency with the goals and objectives defined therein. An alignment alternative is considered highly compatible if it would be located in areas planned for transportation multi-modal centers or corridor development, redevelopment, economic revitalization, transit-oriented development, or high-intensity employment. Compatibility would be considered low if an alignment alternative would be potentially inconsistent with local or regional planning documents... (page 3.7-2)*

In addition to the program-level analysis, local standards and requirements will be considered during preliminary engineering and Tier 2 project-level environmental review, and during final design. Please refer to Chapter 6 for a review of the potential of the HST stations to promote sprawl.

Development of parcel maps, zoning maps, and ownership data is well beyond what is required for a program-level review. The land use analysis did review the land use compatibility in areas (including station areas) where right-of-way would need to be acquired. Please see Section 3.7.1, Land Use Compatibility, which states:

*Because in this analysis an area's sensitivity or compatibility is based on the presence of residential properties, low, medium, and high levels of potential compatibility are identified based on the percentage of residential area affected, the proximity of the residential area to facilities included in an alignment alternative, and the presence of local or regional uses (such as parks, schools, and employment centers). For highway corridors (under the No Project Alternative) and for proposed alignment alternatives, land use compatibility was assessed using GIS layers (or aerial photographs where available) to identify proximity to housing and population and to determine whether the alignment alternatives would be within or outside an existing right-of-way in the study area. Potential impacts are considered low if existing land uses within a potential alignment, station, or maintenance facility area are found to be compatible with the land use changes that may result from the alignment alternative. The type of improvement*



*that would be associated with the alignment alternative would also affect the level of potential impact...* (page 3.7-2)

Wetland, agricultural land, and geologic impacts are reviewed in Sections 3.14, 3.8, and 3.13. For a discussion of existing land use—the environmental land use setting—please see Section 3.6, B. Discussion of Resources by Corridor, Existing Land Use. As stated,

*This section briefly discusses the land use–related resources by corridor along HST Alignment Alternatives in the study area and vicinity. The following five land use-related resources are addressed: (1) existing and planned land use, (2) population characteristics, (3) income, (4) neighborhood and community characteristics, and (5) housing. (page 3.7-6)*

#### **0007-107**

The contention that land use impacts are reviewed for only one network alternative each for Pacheco and Altamont is incorrect.

All alignment alternatives are reviewed in Section 3.6, B. Discussion of Resources by Corridor, Existing Land Use. Table 3.7.3 reviews land use compatibility, community cohesions, property impacts, and environmental justice for each of the alignment alternatives under consideration, and each of these impacts are reviewed for each of the alignment alternatives in Section 3.7.3, Environmental Consequences. Land use impacts (i.e., compatibility, environmental justice, community, and property) for all alignment alternatives are also provided in Tables 7.3-1 through 7.3-11 in Chapter 7.

The composition of the network alternatives is described at the beginning of Chapter 7 of the Draft Program EIR/EIS, which states:

*The purpose of this chapter is to summarize and compare the physical and operational characteristics and potential environmental consequences associated with different combinations of alignment alternatives that comprise the HST Network Alternatives, as well as differences among alignment alternatives and potential station location options. This chapter summarizes potential environmental consequences for each of 21 representative network alternatives for the environmental resource areas where relative differences were identified (refer to Chapter 3 under Affected Environment, Environmental Consequences, and Mitigation Strategies for a*

*comprehensive presentation of potential environmental consequences in each environmental resource area for each alignment alternative). The 21 representative network alternatives present a range of reasonable alternatives among the three basic approaches for linking the Bay Area and Central Valley: Altamont Pass (11 network alternatives); Pacheco Pass (6 network alternatives); and Pacheco Pass with Altamont Pass (local service) (4 network alternatives). (page 7-1)*

#### **0007-108**

Please see Standard Response 2 and Chapter 6 regarding station area development. Infrastructure and public service requirements will be further evaluated as part of the preliminary engineering and project-level environmental review. See also Chapter 5 and Standard Response 4. The need for general plan and zoning amendments by the local jurisdictions will be reviewed at the project level. The Program EIR/EIS appropriately reviews and discloses land use impacts at the program level.

#### **0007-109**

Please see Standard Responses 2 and 4. Please see Response to Comment 0007-106, which notes that general plans were reviewed as part of the land use evaluation and notes that existing land uses along each corridor are described in Section 3.6.B, Discussion of Resources by Corridor, Existing Land Use.

Regarding the study area, Section 3.7.1.B, Methods of Evaluation of Impacts, states:

*The analysis was conducted using U.S. Census 2000 block group information/data compiled in a geographic information systems (GIS) format, local community general plans or regional plans, and land use information provided by the planning agencies in each of the regions. Existing and future conditions were described for the No Project Alternative by documenting existing information for existing and planned future land use policy near HST Alignment Alternatives and potential station location options, development patterns for employment and population growth, demographics, communities and neighborhoods, housing, and economics...*

*“...Because this is a programmatic environmental review, the analysis of these potential impacts was performed on a broad scale to permit a comparison of relative differences among the alignment alternatives. Further evaluation of potential impacts would occur at the project-level environmental review. (page 3.7-1-2)*

The study area for growth inducement is California’s 58 counties grouped into seven geographic regions, as noted in Chapter 5, Section 5.2.2, Study Area and Alternatives. There will be further study of community impacts in future Tier 2 project-level environmental analysis, when more detailed information concerning the HST system design, engineering, and operations will be available, and will support more detailed review of environmental impacts.

#### **O007-110**

Please see Standard Response 5 regarding mitigation strategies. The Authority and FRA agree that additional mitigation strategies may be appropriate for potential land use impacts and further consideration of the mitigation strategies included in this Final Program EIR/EIS will occur in future project-level analyses.

Please see Standard Response 4 regarding potential growth inducement; Chapter 6 for station area development policies; Chapter 8, Section 8.6.2.A, regarding the Los Banos area; and Section 3.7 and Section 3.15.5 regarding future consideration of easements to provide mitigation for impacts.

#### **O007-111**

Please see Standard Response 5, Response to Comment O007-37 regarding the identification of significant impacts and the determination of significance with mitigation, and Response to Comment O007-60 regarding station configurations.

#### **O007-112**

Please see Standard Response 4 regarding growth, as well as Response to Comment O007-15.

The Authority and FRA disagree that the growth-inducement analysis is inadequate, contradictory, or flawed. The assertion that the Program EIR/EIS characterizes HST growth potential as “potentially beneficial” is false; that term is not used in the Program EIR/EIS in relation to induced growth or secondary impacts.

#### **O007-113**

The comment reflects a lack of understanding about potential for rail systems to stimulate land use development and urban growth, which is limited to effects from stations. Please see Standard Response 4 regarding growth and discussion of Los Banos in Chapter 8.

The spatial allocation model used in the growth-inducement analysis (CURBA) accurately characterizes the development potential of land parcels based on ownership, aerial photography (to verify current development patterns), and other critical factors (e.g. access to employment, adjacency to current development and transportation facilities, etc.).

The historical growth examples noted by the commenter are irrelevant for analyzing the potential growth-inducement effects of an HST alternative. The highway improvements that contributed to growth in the San Fernando Valley, Contra Costa County, and other locations disperse accessibility benefits over a very wide geographic area – essentially for several miles around any interchange. The HST alternatives, on the other hand, would provide very localized accessibility benefits to a limited number of station sites around the state. For example, between Sacramento and the Grapevine, there are more than 50 interchanges just on I-5; there are only six preferred HST stations in all of the Central Valley. Therefore, it would be inappropriate to draw conclusions about the type of growth and development that might ensue with the HST system based on the widely dispersed development patterns that are sometimes associated with freeway expansion projects.

The HST system would not lead to a significant increase in commute accessibility between Central Valley homes and Bay Area or southern California jobs. When combined with the fact that the preferred HST



station sites are located in existing downtown areas, HST would not open up new areas to development.

#### **O007-114**

The comment points to an example of the meaningful station-by-station differences in growth effects that were described in the Draft Program EIR/EIS to assist the reader. Please see Standard Response 4 regarding growth.

The Authority and FRA disagree that the growth-inducement analysis does not provide sufficient information on HST alignment and rail stations consistent with the program-level of analysis. Refer to Standard Response 4 regarding growth, as well as Response to Comment O007-15. See Response to Comment F007-12 for a discussion of the need for mitigation of secondary impacts. See Response to Comment F007-12 for a discussion of inferring growth-inducing impacts of specific station sites.

#### **O007-115**

The comment reflects a lack of understanding about potential for rail systems to stimulate land use development and urban growth, which is limited to effects from stations. No station is planned near or in the "Grasslands area." Please see Standard Response 4 regarding growth, and Chapter 8, Section 8.6.2.A.

Contrary to the commenter's assertion, introduction of HST along the Pacheco (or Altamont) alignment will not make it possible for Bay Area employees to easily commute to and from locations around the Grasslands area, or elsewhere in the Central Valley. See Standard Response 4 for a discussion of the commute accessibility potential of HST versus auto; Response to Comment O007-113 for a discussion of general accessibility differences between highways and HST; and Response to Comment O006-6 for a discussion of how access and egress to an HST station affects the door-to-door travel time and cost of HST relative to auto.

#### **O007-116**

The methodology used to derive the results shown in Table 5.3-5 and all subsequent tables is summarized in Section 5.3.1 and detailed in the technical report on economic growth effects<sup>4</sup>. The values presented in these tables are accurate, reasonable, and logical.

The induced population and population growth in each county are a function of three factors: 1) changes in highway VMT and vehicle-hours of travel (VHT) due to diversion of highway trips to HST and access/egress to HST stations; 2) utility benefits that travelers gain by switching to HST from air, auto and conventional rail; and 3) improved access to labor and markets due to the introduction of HST. The three factors are somewhat interrelated, yet can interact in complex and conflicting ways.

At a county level, the Altamont and Pacheco alignment alternatives provide about the same extent of utility benefits for travel to/from the Bay Area, and they also create about the same VMT and VHT reduction due to diversion of auto trips to HST. The key factor that leads to the results noted in the comment (higher Contra Costa County and Alameda County growth under Pacheco than Altamont) is the increase in auto VMT and VHT due to HST station access/egress. Essentially, counties with HST stations end up with increased VMT/VHT due to in the influx of travelers from adjacent counties; this influx reduces the relative travel time benefit for the counties with the HST stations, and in turn reduces the induced population and employment growth. From a growth inducement standpoint, the improvements in access to labor and markets are simply not able to offset the travel time benefit of having an HST station in the county.

<sup>4</sup> Cambridge Systematics, Inc.; Economic Growth Effects Analysis for the Bay Area to Central Valley Program-Level Environmental Impact Report and Tier 1 Environmental Impact Statement – Final Report; July 2007.



**O007-117**

The FRA and Authority disagree that the growth analysis needs to be redone. Please see Standard Response 4.

Section 5.2.2 in the Program EIR/EIS provides the list of HST stations that were included in the quantitative growth analysis. See Response to Comment F007-12 for a discussion of inferring growth-inducing impacts of specific station sites.

Sections 4.2 and 5.2 of the technical report on economic growth effects provide a detailed review of growth inducing differences between the alternatives, and these differences are fully disclosed in summary fashion in Section 5.3 of the Bay Area to Central Valley Program-Level EIR/EIS. These discussions are based on information derived from a multi-tiered analytic process and state-of-the art economic forecasting tools. The methodology, assumptions and supporting data for the analysis process are fully explained in the technical report on economic growth effects. See Response to Comment O007-15 for a summary of this analysis process.

**O007-118**

The growth analysis considered and described the changes from the existing conditions to the future No Project Alternative. The comment reflects a lack of understanding that growth in all parts of the study region will take place with or without the HST system. Please see Standard Responses 1, 2, and 4.

The growth-inducement analysis comprehensively considers all assumed demographic, economic and transportation system features of each alternative as described in Chapters 2, 3 and 5. By definition, “undeveloped areas [that are] underserved by roads and transit” are unlikely to experience induced growth since they lack access to employment, consumers, and other key necessities of everyday life. Since preferred HST station sites are in currently developed downtown areas, HST will not improve accessibility to undeveloped areas.

**O007-119**

The comment reflects a lack of understanding of concentrating effects of rail (transit, commuter, intercity, and high-speed) stations on land development and urban growth demonstrated in countless locations around the world. Please see Standard Response 4 regarding growth.

The methodology, assumptions, supporting data, results, and conclusions for the analysis process are explained and substantiated in the technical report on economic growth effects. (See Response to Comment O007-15 for a summary of this analysis process.) In particular, see Section 3.3 and Appendices E and F in that report for a discussion of the models and data that were used to derive the analysis results and conclusions. The technical report demonstrates that consistent development and density assumptions were used for all alternatives, and that a continuation of each county’s trend in development patterns was assumed except for a small density increase within 1-mile of an HST station.

The analysis indicates that HST system “concentrates commercial growth around stations” and is “correlated with higher overall growth rates.” Results and conclusions presented in Chapter 5 support these points. The HST system also has the potential to disperse “residential populations and induce long distance commuting,” but only if HST offers substantially better door-to-door travel time and cost than competing options; these conditions would not be met for the vast majority of Central Valley locations (see Standard Response 4 regarding growth).

“Land consumption,” as used in Table 5.3-7, is equivalent to the increase in the size of urbanized area as shown in Table 5.3-6. The figures shown in Table 5.3-7 for the entire study area are not misleading or overly broad. Results from Tables 5.3-5 and 5.3-6 can be used to derive comparable results for any county or combination of counties in the study area.



**O007-120**

See Standard Response 4, and Response to Comments L029-114 and O007-113. The proposed HST system could perhaps induce some ranchette development only if HST removed the barrier of accessibility to jobs; but such barrier removal would not occur with the HST system. Ranchettes, by definition, are not located in urbanized areas; they are low-density housing options that, even in the Central Valley, will be located well away from downtown areas and HST stations. While residents of many ranchettes will be geographically closer to a Central Valley HST station than to most Bay Area jobs, the door-to-door time and cost via HST would quickly exceed a pure auto drive for residents of low-density Central Valley ranchettes that commute to Bay Area jobs. Individuals living in outlying ranchettes would be unlikely to use HST on a daily basis due to the greater time and monetary cost associated with using HST versus automobile for long-distance commutes. See Standard Response 4 and Response to Comment O006-6 for further discussion of the reasons why HST will not remove accessibility barriers between Central Valley homes and Bay Area jobs.

**O007-121**

The commenter has misstated the paragraph in question, and this misstatement misrepresents the conclusion. The paragraph actually reads:

*In short, either HST Network Alternative provides a strong incentive for directing urban growth and minimizing a variety of impacts that are frequently associated with growth. This outcome would be seen in results for resource topics such as farmland, hydrology, and wetlands, where the indirect effects of either HST Network Alternative are in some cases less than the No Project Alternative, even with more population and employment expected with the HST Network Alternative.* (underlined text was omitted from commenter's quote)

The conclusion, as actually written in the Program EIR/EIS is fully supported by results presented in Tables 5.4-2, 5.4-3, and 5.4-4.

The commenter's discussion of alleged impacts of the BART system is irrelevant when assessing the growth inducement potential of a statewide HST system with widely spaced stations. Further, the commenter also provides no evidence to substantiate the claim that "sprawl development" in Pittsburg and Antioch was related to development of the BART system as opposed to highway expansion or some other factor. Given that only 4% of the Bay Area's job are within walking distance of a BART station (see Response to Comment O006-6), it is not conclusive that BART was the sole or even contributory cause of the alleged outcome.

Contrary to the assertion of the commenter, the Program EIR/EIS does not claim that HST will induce "compact urban growth" or "dense, focused urban development." Chapter 5 indicates that an HST station creates a strong draw for business development (due to economies of agglomeration), and it is this draw that can encourage more compact development patterns in the station area. Although this draw is recognized, the analysis of growth-inducing effects and secondary impacts assumed continuation of each county's trend in development patterns in order to capture growth potential. However, Chapter 6 enumerates station area development principles appropriate to encourage more concentrated development around HST stations.

**O007-122**

The comment expresses concern about a potential increase in the demand for second homes as a result of the proposed HST system, particularly in the Sierra foothills. First, HST would not "bring these areas within an hour of major population centers", as asserted in the comment. Door-to-door travel times between the Sierra foothills and San Jose, for example, would be a minimum of 2½ hours. On top of this high time, problems would be presented by station access/egress between a second home and a Central Valley HST station. For individuals to use HST as a primary access mode to second homes, individuals owning a second home would need to either keep an extra car at a Central Valley HST station (and incur long-term parking costs) or regularly rent a car at a Central Valley HST station. This combination of high egress cost and multiple



mode shifts would be at odds with rational travel and economic behavior. See also Standard Response 4, and Response to Comment L029-114.

#### **O007-123**

No stations are proposed for “greenfield” areas. Please see Standard Response 4.

Preferred HST station sites are in currently developed downtown areas, not “formerly underserved and relatively remote areas” as asserted in the comment. The potential impacts around each proposed station site are described in Chapter 3.

#### **O007-124**

Please see Response to Comment L029-116.

#### **O007-125**

The Authority and FRA disagree that the conclusions regarding no growth-inducing impacts on 4(f) and 6(f) resources are incorrect at this program-level of analysis. Contrary to the commenter’s assertion, none of the three comment letters submitted by the U.S. Fish and Wildlife Service (F002, F005, F008) mentions growth-inducing impacts on 4(f) or 6(f) lands.

#### **O007-126**

San Benito and Monterey Counties are included in the “rest of California” category throughout Chapter 5. See Standard Response 4

#### **O007-127**

The commenter accurately states that the land use efficiencies displayed in Table 5.3-7 differ at the third decimal, and that there is no characterization in the document as to whether these differences are significant. Since the variability of the various models and third-party data sources are not known for a year 2030 analysis, the statistical significance of the difference in results cannot be determined.

#### **O007-128**

No stations are proposed for “greenfield” areas. Please see Standard Response 4 regarding growth, Response to Comments L029-117 and O007-110, Chapter 6, and Chapter 8, Section 8.6.2.A. in this Final Program EIR/EIS.

The commenter’s assertion that Altamont, and not Pacheco, has “stations in locations where the local jurisdiction has enacted ‘smarter’ planning and zoning” is puzzling. Both Altamont and Pacheco Pass network alternatives include HST station options involving smart growth planning. The only substantial difference outside the Bay Area is that Altamont provides the opportunity for an additional HST station in Tracy. Within the Bay Area, the only potential station differences are in southern Santa Clara County and eastern Alameda County.

#### **O007-129**

A single interactive modeling system was used to forecast growth-inducing effects for the entire state. This modeling system, TREDIS/REDYN, uses discrete economic regions that are based on some type of geographic boundary. Creating economic regions using boundaries for individual counties is advantageous because it allows the model itself to simulate economic interaction rather than relying solely on post-processing, as is often done when a single economic region is used. The overall analytic approach and individual models have been independently validated and used elsewhere, and they represent a state-of-the-practice approach that is appropriate for this program-level analysis. See Response to Comment O007-15 for further information.

#### **O007-130**

The conclusion that the Altamont alternative may result in 5,000 more acres of urbanized developed compared to the Pacheco alternative is reasonable given that Altamont is projected to induce 41,000 more people and 13,500 more jobs than Pacheco. More jobs and people will result in more urbanized land.



The spatial allocation model used in the growth-inducement analysis (CURBA) accurately characterizes the development potential of land parcels based on ownership, aerial photography (to verify current development patterns), and other critical factors (e.g., access to employment, adjacency to current development, and transportation facilities).

#### **O007-131**

As noted in the discussion of the spatial allocation model on page F-4 of the technical report on economic growth effects:

*Average infill rates and population densities will increase with additional development. It is an axiom of economics that scarce resources are used more intensely than plentiful ones. Following this logic, as available supplies of developable land are used up, developers seek ways to use remaining land more intensely, either by increasing densities or through redevelopment. Thus, both development densities and infill activity should increase with population growth.*

Footnote 5 on page 5-7 of the Program EIR/EIS clarifies that the statistical relationships in the spatial allocation model reflect historical increases in marginal development density over time, and assumes continuation of this trend into the future for all alternatives. This trend was not selectively changed for one or both HST alternatives in order to provide an objective analysis. See also Response to Comment O007-121.

#### **O007-132**

Please see Response to Comment O007-116.

#### **O007-133**

The Authority and FRA disagree that a revised analysis of potential growth-inducing effects is needed. See Standard Response 4 regarding growth, as well as Response to Comment O007-15.

#### **O007-134**

Please see Response to Comment L029-57.

#### **O007-135**

Please see Response to Comment L029-57. The Authority and FRA are aware of the decision in Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, and the intent and requirements of Sections 4(f) and 6(f). The setting for 4(f) and 6(f) resources will be characterized in greater detail consistent with requirements of Sections 4(f) and 6(f) during the preliminary engineering and project-level environmental review phase. Impacts on 4(f) and 6(f) resources played an important role in the identification of the Preferred Alternative. As noted in Chapter 8, the identified Preferred Alternative would avoid the Don Edwards Wildlife Refuge.

#### **O007-136**

Figure 3.16-1 has been added to show the locations of publicly owned lands.

#### **O007-137**

Please see Response to Comment L029-57.

#### **O007-138**

Please see Response to Comment L029-57.

#### **O007-139**

During the preliminary engineering and project-level environmental review, the Authority and FRA will continue to look for avoidance alternatives for the precise alignment of the Preferred Alternative. In the absence of avoidance, the Authority and FRA will ensure that all possible planning to minimize harm to the resources has occurred. Please see Standard Response 5 regarding mitigation strategies and Response to Comment L029-57.

#### **O007-140**

The analysis of cumulative impacts is in Section 3.17. A list of detailed projects and plans used in the analysis are listed and discussed in Appendix 3.17-A. A definition of cumulative impacts per CEQA and NEPA is included in Section 3.17. Sufficient detail is



provided for this program-level analysis, and further analysis will be included in future Tier 2 project-level environmental analyses, when more detailed engineering, design, and location information will be available for the HST system and when future projects can be considered in more detail.

#### **O007-141**

The cumulative projects included in the analysis were those that would be close to the HST network alternatives and have the potential to result in a cumulative impact on a given resource or those that are of a size/scale that could affect regional resources.

Although both CEQA and NEPA include the requirement to consider “past projects” when addressing cumulative impacts, recent Council on Environmental Quality (CEQ) guidance discounts the value of this assessment of past projects directing that relevance of addressing past projects relates to the “concise description of the identifiable present effects” (CEQ June 24, 2005 Memorandum). Because of the population growth potential and the proximity to study corridors and stations analyzed in this environmental document, a few other major projects are also considered as part of the cumulative analysis, including the University of California at Merced campus. Appendix 3.17-A lists the projects identified for consideration in this cumulative impact analysis. While other project-specific actions may be likely to occur in the study area by 2030, this Program EIR/EIS analyzes the broad environmental issues based on the broad program definition and the regional cumulative impacts and, therefore, does not consider the more localized cumulative issues related to subsequent approvals.

Information from existing environmental documents completed for regional projects, such as regional transportation plans that include transportation improvement projects approved for future implementation under the No Project Alternative and projections made in the state implementation plan for air quality, were used. The list of these projects is included in Chapter 2 (Tables 2.4-1, 2.4-2, and 2.4-3) and Appendices 2-A, 2-B, and 2-C.

#### **O007-142**

The 4,500-acre planned community, El Rancho San Benito, which is located south of the proposed Pacheco Pass alignment and not in the vicinity of the Gilroy station, was included in the cumulative impacts analysis. The Transbay Transit Center and Union City projects were also already included in the analysis and identified in Appendix 3.17-A. The project listed in Sacramento was not included because it was outside the study area.

Mitigation strategies for significant impacts are discussed under each topic in Chapter 3.

#### **O007-143**

Please see Standard Response 5 and Response to Comments L029-61, O007-25, O007-28, O007-37, O007-61, O007-67, and O007-83 regarding the approach to mitigation strategies and the determination of significance with mitigation.

#### **O007-144**

As listed under 3.1.5, Mitigation Strategies and CEQA Significance Effects, of this Final Program EIR/EIS, one of the local mitigation strategies is “Increase bus feeder service and/or add routes to serve the proposed station areas.”

The Draft Program EIR/EIS identifies connectivity for all of the station locations options. Please see Response to Comment O007-81. It has been the Authority and FRA’s experience that transit providers are consistently willing to work with the Authority to provide improved station connectivity (e.g., station design for efficient and convenient transfers). The design of such facilities and the corresponding efficiency and convenience can be developed only during the preliminary engineering and project-level environmental review phase.

#### **O007-145**

Section 3.7.3 reviews the compatibility of each of the station areas with a HST station and notes where TOD planning is already



underway. For instance, the Cities of Tracy (Downtown), San Jose, Millbrae, San Francisco, and Union City have developed planning and redevelopment documents to promote multimodal stations and TOD, with the option for an HST station. Other station areas have not advanced their planning to this level, and in some cases (i.e., Livermore, Pleasanton, Fremont) are concerned with the effects of an HST station in their community. As noted for this mitigation strategy, the Authority and FRA intend to continue the coordination with the planning efforts underway for TOD in the Preferred Alternative station areas.

Please also see Chapter 6, “Station Area Development.”

#### **O007-146**

Comment acknowledged. Please see Chapter 6, “Station Area Development.”

See also Response to Comment F007-12 for a discussion of the need for mitigation of secondary impacts.

#### **O007-147**

See Standard Response 5 regarding mitigation strategies. The Authority and FRA disagree with the statement that the EIR/EIS suggests that all potentially significant impacts will be reduced to less-than-significant levels. As noted in Section 3.15.4, a design practice for the HST includes the use of bridges or elevated railways across water bodies or sensitive natural communities. The new bridges would replace older bridges whenever possible, and the new bridges would use materials and designs to minimize the number of piles/columns in the water. This design practice would minimize impacts. Mitigation strategies for impacts on jurisdictional waters and wetlands are discussed in Section 3.15.5. This section notes that mitigation strategies are expected to substantially lessen or avoid impacts on biological resources in many circumstances, but at the program level, sufficient information is not available to conclude with certainty that the mitigation strategies will reduce impacts on biological resources to a less-than-significant level in all circumstances. The EIR/EIS, therefore, concludes that impacts on

biological resources would remain significant, even with the application of mitigation strategies. Additional environmental analysis for the subsequent Tier 2 document will allow a more precise evaluation of impacts and mitigation measures.

#### **O007-148**

This mitigation strategy can only be further developed in collaboration with the local jurisdictions and local/regional transit providers during the preliminary engineering and project-level environmental review phase, when more detailed information will be available regarding system engineering and design, alignment locations, and station configurations. Such discussions could not realistically be undertaken for all transit providers and all 26 station areas (Table 3.1-4) during the program-level environmental analyses.

#### **O007-149**

Mitigation measures for noise are presented in Section 3.4.5, Mitigation Strategies and CEQA Significance Conclusions, and will be further reviewed and evaluated in project-level environmental documents for selected alignments, when more detailed information will be available regarding system engineering and design and alignment locations.

#### **O007-150**

This mitigation strategy can only be developed in collaboration with the operators of the connecting rail lines (ACE, Capitol Corridor, AMTAK [Caltrans], and Caltrain) and truly depends on the configuration of the HST system—the identification and ultimate approval of the Preferred HST Alternative—and its relation to these feeder lines. The identification of the Preferred Alternative now allows for discussion and development of collaborative agreements during the preliminary engineering and project-level review phase regarding integration of rail services on a line-by-line and station-by-station basis.



**O007-151**

The Authority and FRA disagree with the comment that the program-level mitigation strategies are inadequate. Please see Standard Response 5 regarding mitigation strategies.

The mitigation strategies in the Draft Program EIS/EIS are included because they are considered feasible and have proven to be effective for other rail projects. Costs for these mitigation strategies have been included in the overall project costs as a line item in Appendix 4-A “Total Construction and Right of Way (Includes Environmental Mitigation).”

**O007-152**

Please see Response to Comment O007-69 regarding the evaluation of current conditions, the baseline, and the No Project Alternative.

The Authority and FRA find that the comprehensive information provided in the Draft Program EIR/EIS and its level of detail are fully sufficient to allow for a meaningful comparison of alignment alternatives and network alternatives and for the identification of a Preferred Alternative. The Authority and FRA also find that the Program EIR/EIS provides the appropriate information and framework for the advancement of the project to the preliminary engineering and project-level environmental review phase. The Authority and FRA note, as does the Draft Program EIR/EIS, that the next phase will involve more detailed field reviews and engineering for the Preferred Alternative alignment, which will in turn enable a more precise description of the impacts and the appropriate locational and quantitative aspects of the mitigation measures, and use of the word “potential” will no longer be needed.

The Draft Program EIR/EIS presents the impacts for all alignments and station location options. A comparison is then made of the impacts and benefits of all alignment alternatives and 21 representative network alternatives—not two alternatives—in Chapter 7. The 21 network alternatives are also compared in the Draft Program EIR/EIS Summary.

Each of the impact areas mentioned (with the exception of Energy) are categorized as potentially less than significant after mitigation. Please also see Response to Comment O007-84. Energy impacts are appropriately identified as beneficial.

**O007-153**

Please see Response to Comments O007-154 through O007-157 below.

**O007-154**

Section 2.5.2, Alignment Alternatives and Station Locations Considered but Rejected, refers the reader (page 2-42) to Appendix 2-G for a further explanation of the underlying reasons for rejection of an alignment or station location. Please see page 2G-4 for a more expanded explanation of why this alternative was eliminated from further examination.

**O007-155**

Appendix 2G-4 appropriately describes the status of this corridor and the reason for its withdrawal from further consideration.

**O007-156**

See Standard Response 3 and Chapter 8 regarding identification of Pacheco Pass as the Preferred Alternative. It is important to note that the HST system is designed to serve intercity travel, not local travel as is suggested in the comment. The existing and future BART system and planned Dumbarton service would serve the local travel demand between Fremont and San Jose and San Francisco.

**O007-157**

A station at San Jose Mineta International Airport (Santa Clara) was appropriately considered but rejected. Please see Chapter 2 and Appendix 2G (page 2-G-2), which states that the Diridon station would adequately connect the airport with the HST system.



**O007-158**

The Authority and FRA intentionally reviewed a reasonable range of alternatives for the Bay Area to Central Valley study area, consistent with the Authority Board directive and the requirements of CEQA and NEPA. To limit the number of alternatives would have been a disservice to the citizens of California. Please See Response to Comment O007-40. Please also see Response to Comment O007-34, which suggests that there are an “excessive” number of alternatives.

**O007-159**

The environmentally superior alternative is identified in this Final Program EIR/EIS in the Summary and in Chapter 8.

**O007-160**

Based on a review of the 161 comments in this letter, and based on a review of the public comments provided by the organizations represented in this letter for both the statewide and the Draft Program EIR/EIS for the Bay Area to Central Valley, it is clear to the Authority and FRA that the organizations represented prefer the Altamont alternative.

Additionally, the comments in this letter and from the organizations represented appear to the Authority and FRA to essentially request preparation of a project-level EIR/EIS for all alignment alternatives and station location options in advance of identification of a Preferred Alternative.

The Authority and FRA do not feel that this is legally necessary. The time, effort, and cost of this approach would essentially halt the HST Program, and it ignores the intent and the advantages of preparing a program-level review.

The Authority and FRA have responded to the alleged deficiencies in the Draft Program EIR/EIS. While a few of our responses have led to revisions to the draft document, the Authority and FRA find that none of the alleged deficiencies provide sufficient legal justification for recirculation of the Draft Program EIR/EIS.

Chapter 2, “Alternatives,” of the Draft Program EIR/EIS provides a comprehensive description of the alternatives under consideration and refers the reader to appropriate detailed maps and drawings. Extensive data and information were collected and analyzed and are presented in a comprehensive and uniform manner throughout the Draft Program EIR/EIS for numerous subject areas for all of the Bay Area to Central Valley alignment alternatives and station location options. The comprehensive information provided in the Draft Program EIR/EIS and its level of detail are fully sufficient to allow for a useful comparison of alignment alternatives and network alternatives and for the identification of a Preferred Alternative.

The Authority and FRA also find that the Program EIR/EIS provides the appropriate information and framework for the advancement of the project to the preliminary engineering and project-level environmental review phase. The Authority and FRA note, as does the Draft Program EIR/EIS, that the next phase will involve more detailed field reviews and engineering for the Preferred Alternative alignment, which will in turn enable a more precise description of the impacts and the appropriate locational and quantitative aspects of the mitigation measures.

**O007-161**

The Authority and FRA appreciate the contact information and will notify these individuals of the release of future relevant documents.



**Comment Letter O008 (Daniel Taylor, Audubon California, October 26, 2007)**

O 008



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October 26, 2007

California High-Speed Rail Authority  
 925 L Street, Suite 1425  
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**RE: Draft Bay Area to Central Valley High-Speed Train (HST) Program EIR/EIS**

On behalf of Audubon California, our 48 local chapters and 50,000 members statewide we write in strong opposition to the proposed alignment through Pacheco Pass. We believe this project will adversely harm the unique habitat values and avian resources of the Grasslands Ecological Area.

O008-1

The Grasslands Ecological Area is a wildlife habitat of hemispheric importance. It has been carefully preserved at considerable public expense and private investment for nearly a century. The proposed alignment through Pacheco Pass and the Grasslands will severely undo the conservation efforts that have made the Grasslands such an important part of California's natural landscape. Based on our review of the Pacheco Pass alignment, its bird related impacts present significant and unacceptable threat to California's environment.

**Impact of the Pacheco Pass alignment on the Grasslands Important Bird Area**

O008-2

The Project will adversely impact the Grasslands Important Bird Area, one of California's most important habitats for birds as determined by Audubon's ongoing scientific analysis of avian values, a part of a global ornithological effort led by Birdlife International. Through a process of scientific peer review Audubon California has designated 147 Important Bird Areas (IBA's) in California.

IBAs, are sites that provide essential habitat for one or more species of birds and they include sites for breeding, wintering, and/or migrating species. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape. IBAs may include public or private lands, or both, and they may be protected or unprotected.

To qualify as an IBA, sites must satisfy at least one of the following criteria. The site must support:

- Species of conservation concern (e.g. threatened and endangered species)
- Restricted-ranges species (species vulnerable because they are not widely distributed)
- Species that are vulnerable because their populations are concentrated in one general habitat type or biome
- Species, or groups of similar species (such as waterfowl or shorebirds), that are vulnerable because they occur at high densities due to their congregatory behavior

The Grasslands Important Bird Area is a 160,000-acre mosaic of Central Valley floor habitats in the northern San Joaquin Valley. It lies in the historic plain of the San Joaquin River, in an area historically prone to devastating floods and poor farming soils. This vast network of freshwater marshes (permanent and seasonal), alkali grassland and riparian thickets is the result of decades of collaborative conservation agreements between private duck clubs, California State Parks and the Department of Fish and Game and the federal National Wildlife Refuge System. It is among the largest remaining areas of unplowed land on the floor of the Central Valley. This IBA is most notable for its abundance of native valley grassland and for its staggering concentrations of wintering waterfowl. It hosts over a half million individual ducks, geese and swans each year between November and February with Northern Pintail, Green-winged Teal, Northern Shoveler and Gadwall all having registered numbers in excess of 100,000 birds. It is also a major posts-breeding dispersal area for American White Pelican. This IBA consistently hosts large numbers of breeding Tricolored Blackbirds and may support over a third of the global population of this species in winter. A comparable percentage of Sandhill Cranes may occur in winter and Long-billed Curlews forage in its open pastures and fields, which host breeding colonies of Grasshopper Sparrow in the spring. Winter roosts of White-faced Ibis were estimated at over 10,000 birds, making it the second-largest concentration of the species in winter in California after the Imperial Valley, supporting roughly a third of the state's population. It is a major stopover site for shorebirds moving through the Central Valley, with an average of 10,000 each fall, winter and spring, and over 200,000 counted during peaks, earning it a distinction as a Western Hemisphere Shorebird Reserve Site in addition to its recognition as a RAMSAR site. Several heron rookeries have developed here, with an average of 300 nests of Double-crested Cormorant, Great Blue Heron and Great Egret. Dozens of pairs of Swainson's Hawk breed in the area, a significant percentage of the entire San Joaquin Valley population. The riparian bird community is best developed along the San Joaquin River in the northwest section of the IBA, which supports breeding Yellow-breasted Chat, large numbers of Blue Grosbeak as well as what is likely the southernmost large population of the California-endemic Yellow-billed Magpie on the floor of the Central Valley.

O008-2  
 Cont.

The Pacheco Pass route also has the potential of adversely affecting another **Audubon Important Bird Area, the Bolsa de San Felipe** near Gilroy. This site seasonally hosts over one percent of the global population of the Long-billed Curlew and is home to nine other sensitive bird species including the Northern Harrier, Ferruginous Hawk, Burrowing Owl, Loggerhead Shrike, Least Bell's Vireo, California Swainson's Thrush, Yellow Warbler, Yellow-breasted Chat, and the Tricolored Blackbird. Major features for wildlife include San Felipe Lake just south of Highway 152 about 10 miles east of Gilroy.

O008-3

In conclusion Audubon California strongly opposes the Pacheco Pass alignment of the High Speed Train Program. We urge the commission to avoid routing the project through the Grasslands Ecological Area and to find another alternative that would be less damaging to key natural values. If allowed to be built through the Grasslands the project will compromise a high value area for birds, recreation and nature education. Sacrificing this area, the object of major conservation investment and collaboration is clearly not in the public interest.

O008-4

Thank you very much for your consideration of our views.

Sincerely,

Daniel Taylor  
 Director of Public Policy



U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

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**Response to Letter O008 (Daniel Taylor, Audubon California, October 26, 2007)**

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**O008-1**

The Pacheco Pass network alternatives, including the alignment along Henry Miller Road are in areas that have undergone human change either through the development of buildings, transportation, or through ranching, farming, and other agricultural activities. The alignments were located to minimize impacts on both the built and natural environments. The alignment along Henry Miller Road would not directly impact federally owned or managed lands contained in the area generally identified as the GEA. At the project level, alternatives will be investigated to further minimize or avoid impacts on the GEA (including alternatives to the north and south of the Henry Miller alternative). See also Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA.

The construction and operation of the HST would not undo conservation efforts. Establishment of the GEA occurred well after roads, utilities, farms, and residences were already well established, and the Henry Miller alignment alternative would not further result in additional fragmentation.

Subsequent Tier 2 project-level analysis would include analysis of site-specific impacts, including those related to birds, and specific mitigation measures for impacts on biological resources will be identified. Site-specific mitigation measures will be developed through consultation with state and federal resource agencies. During project-level review, where the agencies determine that mitigation is required to address site-specific impacts from the HST system, mitigation measures may include easements to preserve habitat for sensitive biological resources. The Authority would coordinate with agencies and ongoing mitigation programs in limiting impacts on biological resources and in developing appropriate mitigation measures. In the area along Henry Miller Road and through the Diablo Range, the Authority would work with

stakeholders in developing mitigation that would benefit the GEA and surrounding area.

**O008-2**

See Response to Comment O008-1 regarding impacts on the GEA. Please also see the Response to Comment Letters S006, L029 and O011.

**O008-3**

Similar to the GEA area, the area identified as Bolsa de San Felipe near Gilroy is crisscrossed by a number of roads, and canals and has undergone human change through the development of buildings or through ranching, farming and other agricultural activities. See also Response to Comment O008-1 regarding future Tier 2 analyses and potential mitigation measures.

**O008-4**

See Response to Comment O008-1 regarding impacts on the GEA. Please also see Standard Response 3 regarding identification of the Pacheco Pass as the Preferred Alternative.



**Comment Letter O009 (Jason Rhine, California Outdoor Heritage Alliance, October 22, 2007)**



October 22, 2007

O 009

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

RE: Draft Bay Area to Central Valley High-Speed Train (HST) Program EIR/EIS

Dear Mr. Leavitt:

The California Outdoor Heritage Alliance (COHA), a nonprofit organization dedicated to promoting wildlife conservation and protecting our hunting heritage, strongly opposes the high-speed rail alignment and station location alternative that connects the Bay Area with the Central Valley via the Pacheco Pass traveling through Los Banos and the Grasslands Ecological Area.

O009-1

The Pacheco Pass route would unnecessarily threaten 180,000 acres of vital wetlands and uplands in the Grasslands Ecological Area. This route would be harmful to wintering waterfowl as well as many endangered and threatened species, since 60 percent of the Pacific Flyway's waterfowl use the Grasslands during their annual migration. Additionally, this rail alignment alternative would further fragment the Grasslands Ecological Area – the largest, contiguous wetland complex that still remains in California – and take away from the tremendous investment of public taxpayer dollars already spent to preserve and protect this important area.

COHA believes that the most appropriate way to connect the Bay Area with the Central Valley is the high-speed rail alignment route over the Altamont Pass and through Modesto. This alternative would have significantly less environmental impact and construction costs would be comparable to the Pacheco Pass route. In addition, the San Joaquin Valley Regional Policy Council, which includes representatives from across the Valley, endorses the Altamont Pass route because it would serve more San Joaquin Valley population centers, including Modesto and Stockton.

O009-2

The creation of a high-speed rail system is important to the economy of California. However, the High-Speed Rail Authority must take steps to protect the state's most important wildlife habitat. The Pacheco Pass alternative route does little to ensure the protection of vital wetlands and uplands, and therefore COHA is strongly opposed to it.

O009-3

Sincerely,

Jason Rhine  
Director of Advocacy



U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

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**Response to Letter O009 (Jason Rhine, California Outdoor Heritage Alliance, October 22, 2007)**

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**O009-1**

The Authority and FRA acknowledge receipt of the comments from the California Outdoor Heritage Alliance and the stated opposition to the Pacheco Pass alternative. The Pacheco Pass is identified as the Preferred Alternative in this Final Program EIR/EIS. Reasons for this are provided in Responses to Comments S009-8, L001-3, and L029-72 and in Chapter 8 of this Final Program EIR/EIS.

None of the alignments studied as part of this Program EIR/EIS would extend through Los Banos. The Preferred Alternative identified by the Authority is the Pacheco Pass, San Francisco and San Jose Termini, which includes the Henry Miller alignment, which would extend through a portion of the area identified as the GEA. The Henry Miller alignment alternative was colocated with Henry Miller Road to minimize potential environmental impacts and was further designed at the program level to include over a 3-mile elevated segment through the GEA.

The Henry Miller alignment would extend along Henry Miller Road through two southern portions of the GEA boundary and between, but not across, areas now managed by public agencies. The construction and operation of the HST would not undo conservation efforts or past efforts to protect and preserve the area. The area of the GEA crossed by the project is already bisected by transportation and infrastructure facilities, including rail and roadways, and also includes housing development, farm operations, and land under active agricultural production. Establishment of the GEA occurred well after roads, utilities, farms, and residences were already well established, and the Henry Miller alignment alternative would not further result in additional fragmentation.

Future project-level analyses would include focused surveys for state- and federally threatened and endangered species, wetlands delineations, detailed identification of habitat, and wildlife movement/migration corridors to further identify impacts and

develop site-specific mitigation measures. In addition, engineering design refinements would be undertaken to avoid and/or minimize environmental impacts. This will include evaluating design alternatives to the north and south of the current proposed Henry Miller alignment (between the Central Valley and the Pacheco Pass). Future project-level analyses will include careful consideration of construction and operations impacts from the HST system and additional efforts to avoid and minimize impacts on wildlife, including migrating waterfowl, recognizing both conservation and hunting activities in the area. See also Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA.

**O009-2**

Please see Standard Response 3 and Chapter 8 for the rationale for identifying the Pacheco Pass (San Francisco and San Jose via the Peninsula) as the Preferred Alternative.

The Authority and FRA acknowledge the California Outdoor Heritage Alliance's support for the Altamont alignment. The Pacheco Pass is identified as the Preferred Alternative in this Final Program EIR/EIS. Reasons for this are provided in Response to Comments S009-8, L001-3, and L029-72 and in Chapter 8 of this Final Program EIR/EIS. Please also see Response to Comment Letters the L0019 and L034.

**O009-3**

During project-level review of the Preferred Alternative, the Authority will coordinate with agencies and ongoing mitigation programs in limiting impacts on biological resources and in developing appropriate mitigation measures. In the area along Henry Miller Road, the Authority would work with stakeholders in developing wildlife habitat and wetlands mitigation that would benefit the GEA and surrounding area.



**Comment Letter O010 (Lech Naumovich, California Native Plant Society, October 26, 2007)**



**California Native Plant Society**  
**East Bay Chapter**  
 Conservation Committee

O 010

EBCNPS Conservation Committee

October 26, 2007

Mr. Mehdi Morshed, Executive Director  
 Mr. Dan Leavitt, Deputy Director  
**California High-Speed Rail Authority, EIR/EIS Comments**  
 925 L Street, Suite 1425  
 Sacramento, CA 95814

**RE: Comments on Draft Bay Area to Central Valley High Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS)**

Dear Mr. Morshed and Mr. Leavitt:

The East Bay Chapter of the California Native Plant Society (EBCNPS) appreciates the opportunity to comment on the *Draft Bay Area to Central Valley High Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS)*. The California Native Plant Society (CNPS) is a non-profit organization of more than 10,000 laypersons and professional and academic botanists organized into 32 chapters throughout California. The mission of CNPS is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation.

O010-1

Pursuant to the mission of protecting California's native flora and vegetation, EBCNPS submits the following comments to the DEIR:

**General Comments**

The proposed high speed rail project presents an enticing and exciting solution for intercity travel from the Bay Area to the Central Valley. While EBCNPS is supportive of a low-emissions public transit system, we find the HST project presented in the DEIR, with its goal of developing thousands of miles of high speed rail track on thousands of acres of open land, to be extremely troubling for a number of reasons.

O010-2

First and foremost, we are concerned that this project is likely not to gain the public support necessary to make it viable. A project of this magnitude requires overwhelming public support for its economic requirements and goals to be realized. The average price of tickets, estimated ridership, and costs of maintenance and marketing must all be revealed for public analysis. The July 2007 paper entitled *Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study* (Cambridge Systematics, Inc.) offers some information about assumptions, yet the paper notably becomes confusing where the information is the most critical. One notable obfuscation is presenting *no project alternative* ridership data in riders/day, whereas most

O010-3

estimates for the HST ridership are in riders/year. We feel this paper fails to graphically illustrate how costs and ridership are calculated, therefore requiring readers to flip back and forth through the document to try to understand its essential points. Our best assumption is that this document was not designed for the layperson.

O010-3  
 Cont.

**The worst possible scenario EBCNPS foresees is failure of the project due to lack of public support after construction of thousands of miles of track but before the first train ever hits the steel.** Given the way the information is presented, we believe this is a highly probable outcome of this visionary project.

O010-4

We also find that fire is notably omitted from the EIR analysis. We live in a fire-adapted, fire-prone landscape. Over 100,000 acres have burned in recent fires just in the month of October. It is impossible to imagine that a train moving at speeds of over 200 miles per hour with direct metal-on-metal contact would not increase fire danger. Vegetation maintenance is essential for minimizing wildfire risk, but there is little mention of this cost and how the HSR will address increased fire risk created by this project in a fire-prone environment.

O010-5

We consider the air travel estimates extrapolated from the year 2000 to be both **inappropriate and inadequate**. The above referenced *Ridership and Revenue Forecasting Study* (Table 4.1) shows a 16% **decrease** in annual intrastate airline passengers. The DEIR document fails to consider this downturn in intrastate airline travel (Table 1.2-2). Instead, the DEIR shows an enormous increase in intrastate air travel—about 77% over a 15-year period—based on two data points for intrastate air travel in 1992 and 2000. From a statistical point of view, fitting a line (in this case the air travel estimate) from just two points is absolutely unacceptable. It is regrettable that any “authority” that prides itself on science and analysis would use two data points eight years apart to extrapolate use for the next 20 years.

O010-6

**S-1.2.3 Regional Need Comments**

A. Regional Growth - Population growth assumptions can be reasonably modeled with the current dataset. Growth projections show that the population of California will increase in the next thirty years. But the advancement of computers, the internet, and telecommuting, coupled with the long-term pressure of rising fuel costs, might lead consumers and employees to work and make purchases from home rather than take public transit to work or to shop. How are these factors calculated into the ridership model? Are the assumptions realistic considering that telecommuting is becoming easier and more widespread with time? An analysis for increased telecommuting is essential to avoid overestimating ridership numbers.

O010-7

B. Regional Congestion – It is well documented that with increased congestion and high density infrastructure, there are greater opportunities for economically successful public transit systems. The core questions are: How much regional congestion is caused by local traffic, and how can improvements in local transit systems ameliorate traffic by regional travelers? For instance, the Bay Area's BART system is commonly noted as one of the

O010-8

East Bay Chapter – California Native Plant Society – P.O. Box 5997, Elmwood Station, Berkeley, California 94705



**Comment Letter O010 – Continued**

EBCNPS Conservation Committee

EBCNPS Conservation Committee

most economically profitable transit systems, probably due to the high population density of the area. EBCNPS believes the HSR authority might be sending a confused message about the HST's target ridership, because the proposed HST system is intended to move riders longer distances rather than deal with localized traffic problems. If the heaviest traffic is caused by drivers traveling less than the distance between two HST stops, the proposed high-speed rail system will not rectify regional traffic problems.

O010-8  
Cont.

The draft EIR misspells the common name of Diablo helianthella (sic); the correct spelling is Diablo helianthella.

O010-13

C. Economic Implications – It is not clear that employers will move jobs out of regions with increased traffic congestion. Smart employers typically maintain business in an area where they can attract good employees. With additional work communication options such as telecommuting, the employer may well favor employee base and proximity to consumers over traffic congestion as factors for determining the location of an office.

O010-9

**Special Management Areas**

A certain broad scale of analysis is appropriate for this initial document given its programmatic nature, but the exclusion of the East Bay Regional Park District (EBRPD) in this section of the report is notable. EBRPD manages over 96,000 acres in the two-county "East Bay." EBRPD manages sensitive lands for plants and animals, yet the consultant only mentions the Nature Conservancy (TNC) in this regard. Other large landowners and managers of significant environments in this area include California State Parks, Lawrence Livermore National Laboratory, the Livermore Area Recreation and Park District, and the Tri-Valley Conservancy. EBCNPS notes that the document is inadequate because it presents incorrect information by not including pertinent landowners and partners.

O010-14

D. Environmental Implications - EBCNPS commends the idea of transit-oriented development, but mixed use development is ultimately the best choice. Living and working locally is a more sustainable long-term solution than providing resources by which people can easily commute 100+ miles a day. Again, the assumption that regional transit will be more important than local transit is not well explained or analyzed.

O010-10

In addition, the DEIR fails to address most of the significant ongoing open space planning projects for the region that will be impacted. For instance, the cities of eastern Alameda County are initiating a conservation strategies program and the Bay Area Open Space Council's *Upland Habitat Goals Project* is looking at important conservation targets for the nine-county area. These projects plus others should be included in order to satisfy the environmental reviews due diligence requirement.

O010-15

**S-1.4.12 Growth Impacts**

This section claims that the growth inducing impact of the Altamont Pass network is a mere 2.2% population increase. EBCNPS is not convinced that growth impacts can be determined accurately given that there is no model community with a recently developed HST system. It would be more instructive to give examples that span a range of least effect to greatest effect on growth. For example, the city of Manteca is reasonably affordable and growing at an unprecedented rate. The way the HST would affect this community versus a developed Oakland or a less-developed Livermore is extremely important towards understanding the rider community and anticipated environmental impacts from the project.

O010-11

**Concluding remarks**

EBCNPS does not support this project because of the false assumptions and extrapolations made in estimating ridership, expenses, and benefits of building the system. We are also opposed to the concept of "linking" two geographic areas through undeveloped lands. The East Bay landscapes under consideration contain relatively unfragmented patches of high quality habitat and the existence and maintenance of these landscapes is a public good. The project EIR does not make its case that the proposed high-speed rail system would provide the benefits that it claims.

O010-16

**3.15 Biological Resources and Wetlands**

**East Bay to Central Valley Corridor**

**Special Status Species**  
*Special Status Plants*

A number of plant species that are considered rare have not been included in the Altamont Pass species list. Some of these species are so rare they do not have status yet (for example, *Deinandra baccigalupii* – Livermore tarplant), while others are locally rare and their populations serve as important range extensions for the species. The preservation of a species at the edge of its natural range is extremely important for conservation botany and these species need to be included in the EIR and project impacts. Attached to these comments is a list of rare and unusual plants from the Livermore Valley that should be included in the EIR.

O010-12

Thank you for your consideration of the above comments. Please do not hesitate to contact me with questions at (510) 734 0335.

Sincerely,

Lech Naumovich  
Conservation Analyst  
California Native Plant Society  
East Bay Chapter  
conservation@ebcnps.org



**Comment Letter O010 - Continued**

EBCNPS Conservation Committee

EBCNPS Conservation Committee

**CEQA-Protected Rare and Unusual Plants  
of the Livermore Valley and Altamont Pass Regions  
2005  
(Statewide Rare Plants in Upper Case)**

Rank in East Bay	Species	Common Name	Habitat
A2	<i>Allenrolfea occidentalis</i>	iodine bush	Alkali areas
A1	<i>Allium crispum</i>	crinkled onion	Dry Open Slopes; Serpentine; Misc. habitats
A2	<i>Amsinckia eastwoodiae</i>	Eastwood's fiddleneck	Grassland; Misc. habitats
*A1	AMSINCKIA GRANDIFLORA	large-flowered fiddleneck	Grassland; Sand or Sandstone; Misc. habitats
*A2	AMSINCKIA LUNARIS	bent-flowered fiddleneck	Grassland; Woodland; Misc. habitats
A1	<i>Astragalus didymocarpus</i> var. <i>didymocarpus</i> ( <i>A. gambeliana</i> is more common)	two-seeded milkvetch	Grassland
*A1	ASTRAGALUS TENER VAR. TENER	alkali milk-vetch	Alkali areas; Grassland; Vernal Pools; Misc. Wetlands
A2	<i>Atriplex argentea</i> var. <i>mohavensis</i>	silverscale	Alkali areas
*A2	ATRIPLEX CORDULATA	heartscale	Alkali areas; Grassland; Misc. Wetlands
*A2	ATRIPLEX CORONATA VAR. CORONATA	crownscale	Alkali areas; Grassland; Vernal Pools
*A2	ATRIPLEX DEPRESSA	brittlescale	Alkali areas; Grassland; Misc. Wetlands
*A2	ATRIPLEX JOAQUINIANA	San Joaquin saltbush	Alkali areas; Grassland; Misc. Wetlands
A1	<i>Atriplex subspicata</i>	saltbush	Alkali areas
*A1	BALSAMORHIZA MACROLEPIS VAR. MACROLEPIS	big-scale balsamroot	Grassland; Serpentine
A1	<i>Bidens laevis</i>	bur-marigold	Freshwater Marsh; Misc. Wetlands
*A2	BLEPHARIZONIA PLUMOSA	big tarplant	Grassland; Scrub
A2	<i>Carex nudata</i>	torrent sedge	Rock, Tallus or Scree; Riparian; Sand or Sandstone areas
A2	<i>Carex senta</i>	rough sedge	Riparian areas; Misc. Wetlands
*A2	CENTROMADIA PARRYI SSP. CONGDONII (Hemizonia parryi ssp. congdonii in Jepson Manual)	Congdon's tarplant	Alkali areas; Grassland
A2	<i>Chamaesyce ocellata</i> ssp. <i>ocellata</i>	valley spurge	Sand or Sandstone
A1x	<i>Chamomilla occidentalis</i> (historical-1938) ( <i>C. suaveolens</i> is more common)	valley pineapple weed	Alkali areas; Salt Marsh; Vernal Pools
A1	<i>Collinsia bartsifolia</i> var. <i>bartsifolia</i>	white Chinese houses	Sand or Sandstone
*A1	CORDYLANTHUS MOLLIS SSP. HISPIDUS	hispid bird's-beak	Alkali areas; Grassland
*A1	CORDYLANTHUS PALMATUS	palmate-bracted bird's-beak	Alkali areas; Grassland
A1	<i>Cryptantha intermedia</i>	common cryptantha	Forest; Rock, Tallus or Scree; Sand

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			or Sandstone; Woodland
A1	<i>Cucurbita foetidissima</i>	calabazilla	Gravel; Rock, Tallus or Scree; Sand or Sandstone
A2	<i>Cuscuta californica</i> var. <i>californica</i>	California dodder	Chaparral; Grassland; Misc. habitats
A1	<i>Cuscuta indecora</i> var. <i>indecora</i>	pretty dodder	Misc. habitats
*A1	DEINANDRA BACIGALUPII	Livermore tarplant	Alkali areas
A1	<i>Downingia bella</i>	Hoover's downingia	Vernal Pools
A2	<i>Downingia cuspidata</i>	cuspidate downingia	Vernal Pools
A2	<i>Downingia insignis</i>	cupped downingia	Vernal Pools
A2	<i>Elymus elymoides</i> ssp. <i>elymoides</i>	squirreltail	Grassland
A2	<i>Ericameria arborescens</i>	golden-fleece	Chaparral; Forest; Woodland
A2	<i>Eriogonum angulosum</i>	angle-stemmed eriogonum	Sand or Sandstone; Misc. habitats
A2	<i>Eriogonum luteolum</i> var. <i>luteolum</i>	golden carpet	Gravel; Sand or Sandstone; Serpentine
*A2	ERODIUM MACROPHYLLUM	round-leaved filaree	Grassland; Scrub
*A2	FRITILLARIA AGRESTIS	stinkbells	Alkali areas; Grassland
*A2	HESPEREVAX CAULESCENS (H. sparsiflora is more common)	hogwallow starfish	Vernal Pools
A1	<i>Heterodraa unilateralis</i>	heterodraa	Grassland
A2	<i>Hordeum depressum</i>	low barley	Alkali areas; Vernal Pools; Misc. Wetlands
A2	<i>Hordeum jubatum</i>	foxtail barley	Misc. habitats
A1	<i>Hutchinsia procumbens</i>	prostrate hutchinsia	Alkali areas
A1	<i>Juncus ambiguus</i>	toad-rush	Alkali areas; Brackish Marsh; Salt Marsh
A2	<i>Juncus articulatus</i>	jointed rush	Misc. habitats
A1	<i>Lagophylla ramosissima</i> ssp. <i>congesta</i> (ssp. <i>ramosissima</i> is more common)	hare's-ear	Misc. habitats
*A2	LASTHENIA FERRISIAE	Ferris's goldfields	Alkali areas; Vernal Pools
A2	<i>Lasthenia fremontii</i>	Fremont's goldfields	Vernal Pools; Misc. Wetlands
A2	<i>Lasthenia minor</i>	woolly goldfields	Grassland
A2	<i>Layia chrysanthemoides</i>	smooth layia	Grassland
A2	<i>Lepidium dictyotum</i> var. <i>acutidens</i>	sharp-toothed pepper-grass	Alkali areas
A1	<i>Lepidium nitidum</i> var. <i>oreganum</i> (var. <i>nitidum</i> is more common)	shining pepper-grass	Alkali areas; Vernal Pools; Misc. habitats
A2	<i>Leptochloa fascicularis</i>	bearded sprangletop	Misc. Wetlands
A1	<i>Leptochloa uninervia</i>	dense-flowered sprangle-top	Misc. Wetlands
*A1	LINANTHUS ACICULARIS	bristly linanthus	Chaparral; Grassland; Woodland
*A1	LINANTHUS GRANDIFLORUS	large-flowered linanthus	Grassland; Gravel; Sand or Sandstone; Scrub
A1	<i>Linanthus liniflorus</i>	flax-flowered linanthus	Scrub; Serpentine; Woodland; Misc. habitats
A2	<i>Lithophragma parviflorum</i> var. <i>parviflorum</i>	prairie star	Misc. habitats
A2	<i>Lotus strigosus</i>	strigose trefoil	Chaparral; Scrub
A1	<i>Lupinus affinis</i>	lupine	Misc. habitats
A2	<i>Madia elegans</i> ssp. <i>vernalis</i> (ssp. <i>densifolia</i> is more common)	common madia	Grassland
A2	<i>Mentzelia affinis</i>	Hydra stick-leaf	Grassland; Sand or Sandstone; Woodland

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U.S. Department of Transportation  
**Federal Railroad Administration**

**Comment Letter O010 - Continued**

EBCNPS Conservation Committee

A1x	Mentzelia laevicaulis (historical-1969)	blazing star	Dry Washes; Rock, Tallus or Scree; Sand or Sandstone
A2	Microseris campestris	San Joaquin microseris	Grassland; Vernal Pools
A2	Microseris elegans	elegant microseris	Grassland; Vernal Pools
A2	Mimulus pilosus	downy monkeyflower	Dry Washes; Gravel; Riparian; Sand or Sandstone
A2	Minuartia californica	California sandwort	Chaparral; Dry Open Slopes; Grassland/Rock, Tallus or Scree; Sand or Sandstone; Serpentine
A1x	Monolopia lanceolata (historical-1941)	common monolopia	Chaparral; Dry Open Slopes; Grassland; Woodland
*A1	MYOSURUS MINIMUS SSP. APUS	little mousetail	Alkali areas; Freshwater Marsh; Vernal Pool
A2	Myosurus minimus ssp. minimus	common mouse-tail	Freshwater Marsh; Vernal Pools
A2	Myosurus sessilis	sessile mouse-tail	Grassland; Vernal Pools
*A2	NAVARRETTIA COTULIFOLIA	cotula navarretia	Misc. Wetlands
A1	Nicotiana attenuata	coyote tobacco	Dry Open Slopes
A2	Nicotiana quadrivalvis	Indian tobacco	Dry Open Slopes; Dry Washes
A1	Nitrophila occidentalis	nitrophila	Alkali areas
A2	Orobanche bulbosa	bulbous broom-rape	Chaparral
A2	Orobanche vallicola	California broom-rape	Forest; Woodland
A2	Penstemon heterophyllus var. purdyi	foothill penstemon	Chaparral; Forest; Grassland
A2	Petunia parviflora	wild petunia	Dry Washes
A2	Phacelia ramosissima var. ramosissima	branching phacelia	Dry Open Slopes; Dry Washes; Grassland; Misc. habitats
A2	Phacelia tanacetifolia	tansy phacelia	Gravel; Sand or Sandstone
A1	Phyla nodiflora var. incisa (var. nodiflora is more common)	narrow-leaved fog-fruit	Misc. Wetlands
A2	Pilularia americana	pillwort	Vernal Pools; Misc. Wetlands
*A1	PLAGIOBOTHRYSS GLABER	hairless popcorn flower	Alkali areas; Vernal Pools; Misc. Wetlands
A2	Plagiobothrys leptocladus	alkali plagiobothrys	Alkali areas
A2	Pleuropogon californicus	semaphore grass	Riparian areas; Misc. Wetlands
A1	Puccinellia nuttalliana	Nuttall alkali grass	Alkali areas
A2	Puccinellia simplex	little alkali grass	Alkali areas
A1x	Pyrocoma racemosa var. racemosa (historical-1959)	racemose pyrocoma	Alkali areas; Grassland; Salt Marsh; Misc. habitats
A2	Rumex salicifolius var. denticulatus	willow dock	Misc. Wetlands
A2	Salicornia subterminalis	Parish's glasswort	Alkali areas; Salt Marsh
A1	Scirpus fluviatilis	river bulrush	Misc. Wetlands
A2	Senecio flaccidus var. douglasii	shrubby butterweed	Dry Washes; Rock, Tallus or Scree; Sand or Sandstone
A2	Sesuvium verrucosum	sea-purslane	Alkali areas
A2	Spergularia macrotheca var. leucantha	large-flowered sand spurry	Alkali areas; Vernal Pools
A2	Spergularia macrotheca var. macrotheca	large-flowered sand spurry	Alkali areas; Coastal Bluff; Rock, Tallus or Scree; Misc. Wetlands
A2	Sporobolus airoides	alkali sacaton	Alkali areas
A2	Tonella tenella	small-flowered tonella	Riparian areas; Misc. habitats
A1	Torreyochloa pallida var. pauciflora	weak mannagrass	Freshwater Marsh; Riparian
A1?	Trifolium barbigerum var.	Gray's clover	Misc. habitats

EBCNPS Conservation Committee

	andrewsii(?)		
A2	Trifolium barbigerum var. barbigerum	bearded clover	Misc. habitats
*A1x	TRIFOLIUM DEPAUPERATUM VAR. HYDROPHILUM (Vars. amplexens and truncatum are more common)	saline clover	Alkali areas; Salt Marsh
A2	Trifolium flavulum (Included within T. fucatum in Jepson Manual)	bull clover	Alkali areas; Grassland; Serpentine; Misc. Wetlands
A1	Trifolium gambelii (Included within T. fucatum in Jepson Manual)	bull clover	Alkali areas; Grassland; Serpentine; Misc. Wetlands
A2	Trifolium lilacimum (Included within T. barbigerum var. andrewsii in Jepson Manual)	Gray's clover	Misc. habitats
*A1x	TROPIDOCARPUM CAPPARIDEUM (HISTORICAL-1981 BUT NOT SEEN SINCE THEN)	caper-fruited tropidocarpum	Alkali areas; Grassland
A2	Vicia hassei	slender vetch	Grassland; Scrub
A2	Vulpia microstachys var. pauciflora is more common)	Nuttall's fescue	Dry Open Slopes; Rock, Tallus or Scree; Sand or Sandstone; Serpentine; Woodland

**NOTE:** Plant species followed by "(?)" have taxonomic or distribution problems and it is not clear if they occur here.

Dates indicated for historical species refer to last known record in the Alameda-Contra Costa Counties area.

**Explanation of Ranks**

**\*A1 or \*A2:** Species in Alameda and Contra Costa counties listed as rare, threatened or endangered statewide by federal or state agencies or by the state level of CNPS.

**A1x:** Species previously known from Alameda or Contra Costa Counties, but now believed to have been extirpated, and no longer occurring here.

**A1:** Species currently known from 2 or less regions in Alameda and Contra Costa Counties.

**A2:** Species currently known from 3 to 5 regions in the two counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, etc.



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**Response to Letter O010 (Lech Naumovich, California Native Plant Society, October 26, 2007)**

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**O010-1**

The Authority and FRA acknowledge receipt of comments from the East Bay Chapter of the California Native Plant Society.

**O010-2**

The Authority and FRA acknowledge and share the East Bay Chapter of the California Native Plant Society's concerns regarding impacts on open land. As noted in this Program EIR/EIS, the Authority and FRA have by design identified alignments, including the Preferred Alternative, that are adjacent to or within existing public transportation right-of-way to reduce the impacts of the HST system.

**O010-3**

Comment acknowledged. The ridership reports were developed with the intent of providing a large amount of information to many different types of readers, including the "lay person."

Annual HST ridership should be divided by 365 to obtain average daily HST ridership. Ridership forecasts have been included in a summary, comparative fashion in the Program EIR/EIS. The forecasting process and results have been thoroughly documented in a series of technical reports that are posted on the Authority web site at <http://www.cahighspeedrail.ca.gov/ridership/>. These reports have been available at this location throughout the public comment period for the Draft Program EIR/EIS. See Chapter 4 regarding costs.

**O010-4**

The Authority and FRA understand the need for public support of the HST system during the planning, construction, and operating phases of this statewide public works project. Information regarding the project's impacts and benefits will be increasingly available for public review and comment as the preliminary engineering and project-

level environmental reviews are completed for the Bay Area to Central Valley and the other corridors throughout the state.

**O010-5**

While the HST system may result in additional fire danger, the design of the HST trackway and operating systems would be state-of-the-art, would minimize the potential fire risk, and would include preventive and protective measures for public safety and security. Further study of such risks would be included in future Tier 2 project-level environmental analyses.

**O010-6**

Air travel estimates are not extrapolated from year 2000 data as asserted in the comment. Travel forecasts for all modes, including air, are based on a statistical model that first predicts total statewide travel, irrespective of travel mode, based on demographic and economic forecasts for each community. Total statewide travel is then assigned to one of the available travel modes (air, auto, conventional rail, or HST) based on the relative time, cost, convenience, and related factors of all travel options available in each market.

The 77% value noted by the commenter, which was shown in Table 1.2-2, is a third party projection that is shown for reference purposes only. As noted in Table 1.2-2, "these data ... differ from the HST ridership forecasting model, which includes only in-state travelers." Table 5.4 in the *Bay Area/California High-Speed Rail Ridership and Revenue Forecasting Study, Final Report* shows a 47% increase in intrastate air travel between 2000 and 2030, which is consistent with projected population and employment growth during this time period.

**O010-7**

The ridership and revenue forecasts used in the Program EIR/EIS rely on official population and employment forecasts developed by



the California Department of Finance and regional planning agencies throughout the state. The forecasts in the Program EIR/EIS assume continuation of current trends regarding telecommuting, fuel costs and similar factors that influence people's desire and willingness to travel. Although ridership and revenue sensitivity tests were developed to understand the potential effects of changes in these factors, the "most likely" future scenario, based on continuation of current trends, was used for the Program EIR/EIS rather than speculative changes in some variables.

#### **O010-8**

Table 3.1-2, Impacts to 2030 Peak-Hour Traffic on Intercity Freeways from Diversion to HST, of the Final Program EIR/EIS illustrates the magnitude of traffic diversions that are expected on regional routes in Bay Area to Central Valley region. The table shows that where urban traffic dominates, the traffic savings are modest. On I-5 south of I-580 where regional traffic is more in the preponderance, the HST diversion approaches 20%, which is a substantial change on a congested freeway.

#### **O010-9**

The Authority and FRA concur with the assertion that employers emphasize proximity to employees and consumers over avoidance of traffic congestion when making business location decisions. These principles influence the economic growth analysis presented in Chapter 5. The HST system would improve access to both employees and consumers for all areas of the state, particularly the Central Valley. At the same time, the HST system would offer modest improvements in travel time, cost and accessibility, especially for medium-to-long distance intrastate trips. The combination of these HST benefits creates the growth-inducement potential reported in Chapter 5.

#### **O010-10**

Section 3.7.3 of the Draft Program EIR/EIS reviews the compatibility of each of the station areas with a HST station and notes where TOD planning is already underway. For instance, the Cities of Tracy

(Downtown), San Jose, Millbrae, San Francisco, and Union City have developed planning and redevelopment documents to promote multimodal stations and TOD, with the option for an HST station. The Authority and FRA intend to continue the coordination with the planning efforts underway for TOD in the Preferred Alternative station areas.

The Authority and FRA agree that providing alternatives to the automobile via the provision of local, regional, and statewide transit options is a worthwhile goal. The HST system is focused on the longer distance markets, but the Authority and FRA are critically aware of the need for integrated regional commute and local transit connections as part of the mix of transit options to the automobile.

#### **O010-11**

The growth inducement potential is not a function of introducing the HST system, per se, but rather the travel time, cost, and accessibility benefits that the HST system would provide relative to other travel options that are available from that community. Since it is possible to accurately predict travel times and costs via HST, it is irrelevant "that there is no model community with a recently developed HST system." Even though most Central Valley communities have substantially lower housing costs than Bay Area communities, the HST system's growth-inducement potential is limited since HST does not provide faster door-to-door travel times than auto in most short to medium distance travel markets between the Central Valley and Bay Area.

#### **O010-12**

This comment provides data on rare plants located in the Altamont Pass area. This data will be used for detailed surveys as part of the Tier 2 project-level environmental analysis, should the Altamont Pass alignment be selected, and for any alignments that may have the potential to affect these species. The Preferred Alternative identified by the Authority is the Pacheco Pass, San Francisco and San Jose Termini as discussed in Chapter 8.



**0010-13**

The spelling for *Diablo helianthella* has been corrected in Section 3.15 of the Final Program EIR/EIS.

**0010-14**

A description of the East Bay Regional Park District (EBRPD) lands has been added to Section 3.15. The Altamont Pass alignments would pass under the Pleasanton Ridge Regional Park and the Vargas Plateau in a tunnel and would be alongside the rail corridor and elevated through the Alameda Creek Quarries Regional Recreation Area and would minimize potential impacts on biological resources. The Draft Program EIR/EIS analyzed the potential environmental impacts, including biological resources and wetlands, of the HST alignment alternatives and stations regardless of land designation. Impacts on resources within and outside of EBRPD lands were analyzed and are documented in the Draft and Final Program EIR/EIS.

The Tri-Valley Conservancy lands would not be affected by the Altamont Pass alignments since the alignment would be within the I-580 corridor and would not affect conservancy lands to the north. The alignment along the UPRR would be more than 1 mile away from conservancy lands to the south. Parks are discussed in Section 3.16.

**0010-15**

The San Francisco Bay Area Upland Habitat Goals Project is a science-based process that will use existing and new data, supplemented by expert opinion, to recommend the types, amounts, and distribution of upland habitats, linkages, compatible uses, and the ecological processes needed to sustain diverse and healthy communities of plant, fish and wildlife resources in the nine-county

Bay Area. These habitat protection recommendations are intended to inform, but not to dictate, protection strategies and stewardship policies for conservation targets in the nine counties of the Bay Area. The project is anticipated to be completed in 2008. The final results of the Upland Habitat Goals Project would be used as part of the Tier 2 project-level environmental analysis.

Text has been added to Section 3.15 regarding the East Alameda County Conservation Strategy (EACCS). HST planning and implementation would be coordinated with the EACCS if alignments are pursued in eastern Alameda County. The EACCS is not anticipated to be completed until 2009.

The Authority and FRA appreciate the references to the *Bay Area Open Space Council's Upland Habitat Goals Project*. Please note that the Preferred Alternative would not affect these areas in Alameda County. As part of the preliminary engineering and project-level environmental review, the Authority and FRA will review the status of and potential impacts on this ongoing open space planning.

**0010-16**

The Authority and FRA acknowledge the opposition of the East Bay Chapter of the California Native Plant Society to the proposed HST system as described in the Draft Program EIR/EIS, the Society's concerns regarding impacts on undeveloped lands, and the Society's rejection of the ridership, expenses, and benefits as presented in the Draft Program EIR/EIS. The Authority and FRA acknowledge the contact information provided in this letter.



**Comment Letter O011 (Rudolph A. Rosen, Ph.D., Ducks Unlimited, October 22, 2007)**



October 22, 2007

California High-Speed Rail Authority, EIR/EIS Comments  
925 L Street, Suite 1425  
Sacramento, CA 95814

Re: Bay Area to Central Valley High-Speed Train Draft Program Environmental Impact Report and Environmental Impact Statement

Dear Members of the Board:

These comments extend oral comments I presented to the California High-Speed Rail Authority Board at its September 26, 2007 meeting held in Sacramento regarding the Bay Area to Central Valley High-Speed Train Draft Program Environmental Impact Report and Environmental Impact Statement and the concerns of Ducks Unlimited about potential impacts of any alignment of the railway that would route high-speed trains and the railway corridor through or adjacent to the Grasslands Ecological Area (GEA). Ducks Unlimited's recommendation to the Board in September, and now, is that the high-speed railway be sited away from the GEA. We urge the Board to select an Altamont Pass alignment to avoid impacting the GEA and its waterfowl and wildlife habitat. Here is why we make this recommendation.

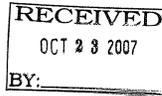
The GEA is located west of the City of Merced and surrounding the City of Los Banos to the north, east and south. Originally, this area was part of a four million acre wetland system in the Central Valley. Of the 300,000 acres that remain, the GEA's 180,000 acres is the largest contiguous block of wetlands left in the Central Valley. The GEA is comprised of wetlands, riparian woodlands, native grasslands, vernal pools, and other habitats which support abundant and diverse wildlife, all of which has been designated by the United States Fish and Wildlife Service as a priority area for protection and enhancement. It is a critical wintering habitat for migratory birds. As much as 20% of all Pacific Flyway waterfowl use the GEA's wetlands during winter. Waterfowl numbers in the GEA average one-half million to up to one-million birds.

Protection of the GEA's wetlands has been a high priority for Ducks Unlimited. The GEA includes federal wildlife refuges, a state park, state wildlife management areas and the largest block of privately managed wetlands in the state. The GEA also includes a growing number of federal and state conservation easements, now totaling over 64,000 acres.

Ducks Unlimited has worked with over 120 private landowners and on all the state and federal public waterfowl areas in the GEA completing over 160 projects

O 011

WESTERN REGIONAL OFFICE  
3074 Gold Canal Drive  
Rancho Cordova, CA 95670-6166  
916-852-2000 916-852-2200 (fax)  
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California High-Speed Rail Authority, EIR/EIS Comments  
October 22, 2007  
Page 2

to improve wetlands for waterfowl. Ducks Unlimited is a nonprofit waterfowl and wetland habitat conservation organization with a mission to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl. Our over one million members, supporters, and volunteers, along with our partners, have invested over \$2.32 billion since 1937 to conserve over 11,661,000 acres of wetlands in North America.

The GEA also provides habitat for more than 550 species of plants and animals, including 47 species listed by the state or federal government as endangered, threatened or candidates to be. The Western Hemisphere Shorebird Reserve Network has designated the GEA as an international shorebird reserve, one of only 15 such internationally significant sites in the world. The GEA was also recently recognized as a Wetland of International Importance by the Ramsar Convention, a recognition reserved for only the world's most important ecosystems. Only 22 such sites have ever been designated in the United States.

According to Ducks Unlimited's biologists and wetlands experts, among the railway's potential impacts to migratory birds and other wildlife, should the alignment run through or adjacent to the GEA, would be interference with wildlife corridors, habitat fragmentation, disruption of water flow and other hydrological impacts that could accompany fragmentation, interference with access to hunting clubs, wildlife collision with trains, construction impacts, water quality impacts, and the overall impact of increased development through suburban and urban expansion in the area surrounding the GEA that could have an indirect impact on waterfowl and wetlands.

Ducks Unlimited takes exception to routing the new railway through or adjacent to the GEA, due to the potential affect on migratory birds. This is a concern echoed by managers of state and federal refuges in the GEA, and officials at the Grasslands Water District which represents the interests of many of the area's private wetlands owners.

Ducks Unlimited urges the Board to select an alignment that completely avoids impacting the GEA, thus we urge selection of an Altamont Pass alignment.

Sincerely,

Rudolph A. Rosen, Ph.D.  
Director

O011-1  
Cont.

O011-1



U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

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**Response to Letter O011 (Rudolph A. Rosen, Ph.D., Ducks Unlimited, October 22, 2007)**

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**O011-1**

The Preferred Alternative identified by the Authority is the Pacheco Pass, San Francisco and San Jose Termini, which includes the Henry Miller alignment, which would extend through a portion of the area identified as the GEA.

The Pacheco Pass network alternatives, including the alignment along Henry Miller Road, are within areas that have undergone human change either through the development of buildings and transportation or through ranching, farming, and other agricultural activities. The alignments were located to minimize impacts on both the built and natural environments. The alignment along Henry Miller Road would not directly impact the state- or federally owned or managed lands contained within the GEA.

The use of elevated sections of the HST system has been included to minimize impacts through the GEA. Mitigation strategies to minimize impacts on sensitive species and habitat and wildlife movement corridors, such as underpasses, bridges, and/or large culverts, and aerial structures have been included in this Program EIR/EIS. The design of these crossings will be further delineated at the project level document to ensure that the design, shape, and size would be sufficient to establish functional corridors facilitating wildlife connectivity and permeability. The design will be developed in consultation with the resource agencies.

The Henry Miller alignment alternative would extend through two southern portions of the GEA boundary and between, but not across, areas now managed by public agencies. This alignment alternative would be adjacent to the existing Henry Miller Road and would avoid or minimize potential impacts on biological resources. The western portion crossed by the alignment alternative closest to Los Banos would extend adjacent to Henry Miller Road and the San Luis Wasteway and cross Ingomar Road south of the Volta Wildlife Area. This area of the GEA is already bisected by transportation and infrastructure facilities, including rail and roadways, and also includes

housing development, farm operations, and land under active agricultural production. The other area of the GEA crossed by the alignment is south of the CDFG Los Banos Wildlife Area. The alignment would extend approximately 3.3 miles on elevated structure, through the GEA boundary along Henry Miller Road. This area of the GEA is bisected by Henry Miller Avenue/Road, State Route 165, Baker Road, Delta Road, Santa Fe Grade, Criswell Avenue, and a number of manmade canals and also includes housing development, farm operations, and land under active agricultural production.

The Henry Miller alignment alternative would not further fragment habitat since the alignment is adjacent to Henry Miller Road, an existing facility, and would be elevated for almost half the distance through the GEA. The general area designation of the GEA occurred well after roads, utilities, farms, and residences were already well established, and the Henry Miller alignment alternative would not further result in additional fragmentation.

The Draft Program EIR/EIS states that aerial structures would be used to avoid impacts on the flow of water in streams, channels, canals, and sloughs. In addition, the HST would restore impacts on floodplains to their prior operation by constructing culverts under the tracks to convey anticipated storm flows and to minimize ponding. Impacts of specific water crossings and on floodplains will be addressed in the Tier 2 project-level document when design of these facilities would be available.

Access routes, such as those to hunting clubs, would either be preserved or rerouted to provide full access.

To mitigate construction impacts on sensitive areas and habitat (as defined at the project level), in-line construction (i.e., use new rail infrastructure as it is built) will be used to transport equipment to/from the construction site and to transport excavated material away from the construction to appropriate reuse or disposal sites.



The potential to induce growth in the GEA or the Los Banos area would be limited because no station or maintenance facility would be located in this area. The closest proposed stations are located in Merced and Gilroy.

Future project-level analyses would include focused surveys for state- and federally threatened and endangered species and detailed identification of habitat, wildlife movement/migration corridors, potential for noise and collision impacts, and wetlands and water resources (including water quality) to further identify HST construction and operational impacts and develop site specific mitigation measures. In addition, engineering design refinements would be undertaken to avoid and/or minimize environmental impacts. This will include evaluating design alternatives to the north and south of the current proposed Henry Miller alignment (between the Central Valley and the Pacheco Pass). See also Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA.

Refer also to Response to Comment Letter L029 for responses to comments raised by the Grassland Water District.



Comment Letter O012 (Gary A. Patton, Planning and Conservation League, October 23, 2007)

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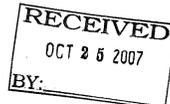
O 012

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Teresa Villegas

To view attachments of this comment letter see electronic file:  
O 012 PCL.pdf

October 23, 2007

Quentin Kopp, Chair, and Members of the High Speed Rail Authority  
925 L Street, Suite 1425  
Sacramento, CA 95814



Attention: Comments on Draft Bay Area to Central Valley Program EIR/EIS

Dear Mr. Kopp and Members of the Authority:

The Planning and Conservation League is joining with a number of other organizations to submit extensive comments on the Draft EIR/EIS prepared on the High Speed Rail Bay Area to Central Valley Program. Those more extensive comments will reach you separately.

0012-1

This letter is to attach an important article by Attorney Dave Owen, discussing the application of the California Environmental Quality Act (CEQA) to projects that might lead to an increase in global warming emissions. The article appears as an Appendix to a soon to be published revision of the Planning and Conservation League Foundation's "Community Guide to the Environmental Quality Act."

0012-2

We strongly believe that the Draft EIR/EIS on the High Speed Rail Bay Area to Central Valley Program must do a better job of analyzing (and mitigating) the global warming impacts of the proposed project, as outlined in the attached paper.

0012-3

Thank you for taking these, and our other, comments into account. The current Draft EIR/EIS needs to be significantly revised and recirculated, prior to being used as the foundation for a decision on the appropriate route for the entry of the proposed High Speed Rail line into the San Francisco Bay Area.

Very truly yours,

Gary A. Patton, Executive Director

Attachment: Climate Change and Environmental Assessment Law



1107 9th Street, Suite 360, Sacramento, CA 95814 Phone: 916-444-8726 Fax: 916-448-1789

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U.S. Department of Transportation  
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**Response to Letter O012 (Gary A. Patton, Planning and Conservation League, October 23, 2007)**

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**O012-1**

Comment acknowledged.

The Authority and FRA acknowledge receipt of comments from the Planning and Conservation League. The Authority and FRA received a letter from Stuart M. Flashman in which he states that he is representing the Planning and Conservation League. Please refer to the Response to Comment Letter O007.

**O012-2**

Comment noted. The Authority appreciates receiving a copy of the article.

**O012-3**

The FPEIS/FPEIR includes a discussion and analysis of global climate change. The proposed HST system is shown to have net beneficial impacts related to climate change. Where beneficial impacts have been identified, mitigation measures are not required.



Comment Letter O013 (Carl Guardino, Silicon Valley Leadership Group, October 25, 2007)

10/25/2007 17:02 14085017861 SVLG PAGE 02/03 10/25/2007 17:02 14085017861 SVLG PAGE 03/03



O 013

October 25, 2007

224 Airport Parkway, Suite 620  
San Jose, California 95110  
(408)507-7684 Fax (408)501-7851  
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Established in 1978 by  
DAVID PACKARD

California High Speed Rail Authority Board  
ATTN: Dan Leavitt  
925 L Street, Suite 1425  
Sacramento, CA 95814

VIA FACSIMILE: 916/322-0827

Dear California High Speed Rail Authority Board Members:

I write on behalf of the Silicon Valley Leadership Group to express our support for the Pacheco Pass alignment as the primary north-south high-speed rail line and for improved commuter rail service from the Central Valley to the Bay Area.

As you may know, the Silicon Valley Leadership Group, founded in 1978 by David Packard of Hewlett-Packard, represents 225 of Silicon Valley's most respected employers on issues, programs and campaigns that affect the economic health and quality of life in Silicon Valley, including energy, transportation, education, housing, health care, tax policies, economic vitality and the environment. Leadership Group members collectively provide nearly 250,000 local jobs, or one of every four private sector jobs in Silicon Valley. The Leadership Group is a Santa Clara County Certified Green Business.

California is facing a multi-billion shortfall in unfunded transportation needs. The high-speed rail line can help solve several of California's most pressing issues. It can alleviate some of the pressure on California's major airports, which are at or near capacity. It can alleviate the need to expand or build new highways in areas of the state that are growing. In addition, it can significantly reduce greenhouse gas emissions by providing an alternative to cars and planes.

For high-speed rail service to be viable and sustainable, it will need to generate enough revenue to cover its operating expenses. To do so, it will need to maximize ridership. For the north-south route, that means providing the fastest, most frequent service possible between the Los Angeles area and the Bay Area's three major urban areas: San Jose, San Francisco and Oakland. And it needs to do it in the most efficient way possible. Pacheco Pass would provide a fast, frequent, and more environmentally sound means of moving greater numbers of people

between northern and southern California, relieving congestion at airports and on highways that are at or near capacity.

If high-speed rail entered the region via Pacheco, it would also help electrify and grade-separate Caltrain, from Gilroy to San Francisco. This would substantially improve local commuter rail service, while improving pedestrian safety and relieving traffic on area streets and roads. For these reasons, we strongly believe the Pacheco Pass should be selected as the preferred alignment for the north-south high-speed rail line.

We also appreciate the need to improve commuter rail service from the Central Valley to Silicon Valley. This is a top priority for our members, and we have been early and strong supporters of ACE. We have also supported efforts to expand Capital Corridor service. For these reasons, we support an upgraded commuter rail corridor to serve the Central Valley via the Altamont Pass.

Thank you for considering our views. We look forward to a speedy resolution of this issue and a successful bond campaign in November 2008.

Sincerely,

Carl Guardino  
President & CEO

O013-3  
Cont.

O013-1

O013-2

O013-3



U.S. Department of Transportation  
Federal Railroad Administration

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**Response to Letter O013 (Carl Guardino, Silicon Valley Leadership Group, October 25, 2007)**

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**O013-1**

Please see Standard Response 3 and Chapter 8 regarding identification of Pacheco Pass as the Preferred Alternative.

The Authority and FRA acknowledge receipt of comments from the Silicon Valley Leadership Group. Consistent with this letter, the Pacheco Pass Alternative is identified in this Final Program EIR/EIS as the Preferred Alternative.

**O013-2**

Comment acknowledged.

The Authority and FRA acknowledge the Silicon Valley Leadership Group's representation.

**O013-3**

Comment acknowledged. Please see Standard Response 3 and Chapter 8 regarding identification of Pacheco Pass as the Preferred Alternative.

The HST system is intended to meet the needs and serve the purposes identified in this comment, namely the alleviation of pressure on California's major airports, the inability to easily expand or build new highways, and the reduction in GHG emissions.

The statements in support of the Pacheco Pass Alternative are among the reasons for identification of the Pacheco Pass as the Preferred Alternative in this Final Program EIR/EIS, namely the fast, frequent, and efficient service between Southern California and northern California's major urban areas, the electrification and grade-separation of Caltrain from Gilroy to San Francisco, and the integration of the HST and Caltrain commuter rail, providing more extensive transit options and service.

Consistent with the Silicon Valley Leadership Group's support for improved commuter service between the Central Valley and Silicon Valley, the Authority is working with the Region's transit providers and planning agencies to assist in the identification of commuter rail improvements in the Altamont Corridor. In that these improvements would not meet the Purpose and Need for the HST program, they are not considered part of the HST Program, but rather an opportunity for the region to improve mobility and access in this corridor and provide connectivity to the HST system. The Authority is currently working with regional stakeholders on the pursuit of funding for possible commuter rail improvements in the Altamont Corridor.



**Comment Letter O014 (Alan C. Miller, Train Riders Association of California, October 26, 2007)**

**TRAC**  
Train-Riders  
Association  
of California

1025 Ninth Street #223  
Sacramento, CA 95814  
  
(916) 557-1667  
trac@omsoft.com



October 26, 2007

California High-Speed Rail Authority  
**Attn:** Dan Leavitt  
925 L Street Suite 1425  
Sacramento, CA 95814

**RECEIVED**  
OCT 26 2007  
BY:

**Re:** EIR/S Comments Submission

Dear Mr. Leavitt:

Our organization's official comments on the EIR/S are submitted in the comment letter by attorney Stu Flashman on behalf of a coalition of environmental and transportation groups.

At the last high-speed rail board meeting in Sacramento, I displayed a large graphic of the proposed Northern Mountain Crossing Routes overlaid upon a satellite photo of city lights at night. Chairman Kopp requested a copy of this item be submitted.

Note: The upper X is the approximate geographic center of the nine Bay Area Counties; the lower X is the approximate population center.

Please consider this an addendum to our comments so that it is placed in the record, and please place the extra copy in Board Chairman Kopp's box.

Thank you,

Alan C. Miller  
Executive Director

**Officers**

William F. McGeehan III  
Contra Costa County  
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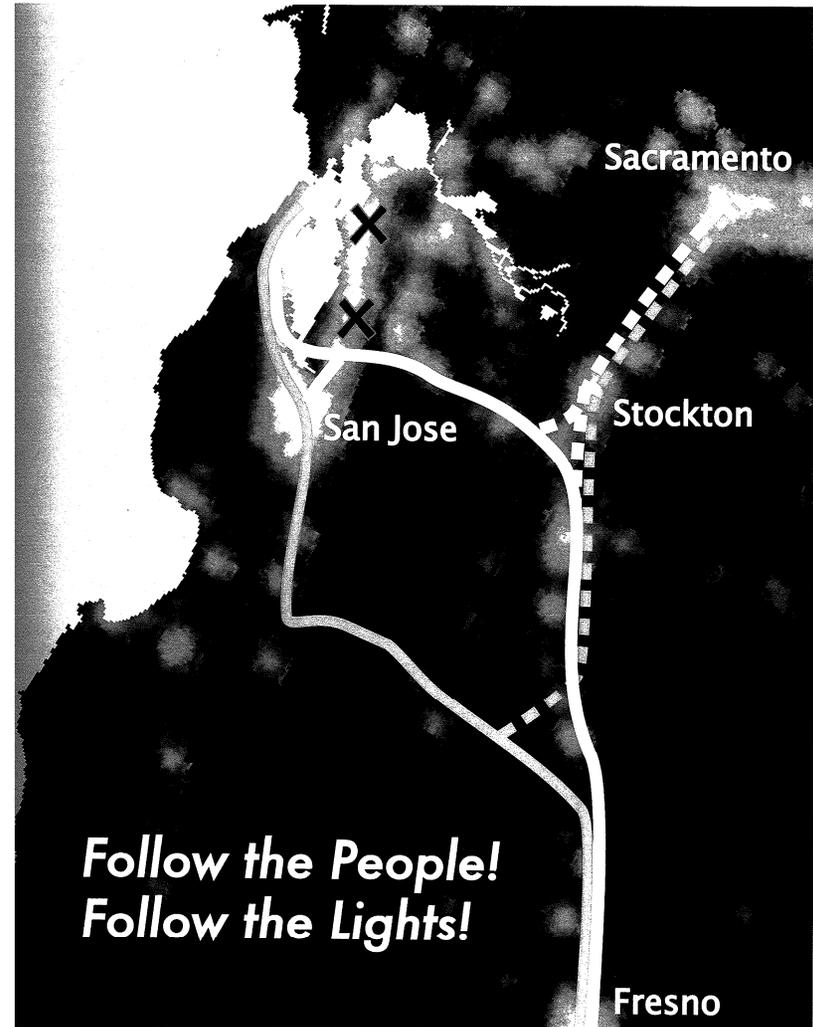
Richard Tolmach  
Sacramento County

**Executive Director**

Alan C. Miller

0014-1

0014-2



TRAC, active since 1984, is dedicated to a vision of fast, frequent, convenient and clean passenger rail service for California. We promote these European-style transportation options through increased public awareness and legislative action.



U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

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**Response to Letter O014 (Alan C. Miller, Train Riders Association of California, October 26, 2007)**

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**O014-1**

Comment acknowledged.

The Authority and FRA acknowledge receipt of comments from the TRAC. The Authority and FRA received a letter from Stuart M. Flashman in which he states that he is representing TRAC. Please refer to the Response to Comment O007.

**O014-2**

Thank you for your submittal.

The graphic provided by Mr. Miller at the Authority Board meeting is included as part of TRAC's comments.

Please see Response to Comment O007.



Comment Letter O015 (Kenneth A. Gosting, Transportation Involves Everyone [TIE], October 26, 2007)

RECEIVED  
OCT 26 2007  
BY:

TRANSPORTATION INVOLVES EVERYONE (TIE)  
Central Valley/Sierra Office  
Post Office Box 3111  
Merced, CA 95344  
(209) 722-4558

October 26, 2007

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

Re: Comment Letter, Draft Bay Area to  
to Central Valley High-Speed Train  
(HST) Program Environmental  
Impact Report/Draft Environmental  
Impact Statement (EIR/EIS)

Dear Mr. Leavitt:

This comment letter is directed to you as the representative for the California High-Speed Rail Authority (HSRA) for the California Environmental Quality Act (CEQA) process on the above-captioned document. Transportation Involves Everyone (TIE), a project under non-profit organization sponsorship that is dedicated to achieving excellence in transportation requests that this letter become part of the record on the issue of alignment selection for high-speed trains between the Central Valley and the San Francisco Bay Area.

O015-1

Despite its length at some 1,700 pages, the draft environmental impact statement is fatally flawed.

O015-2

Aside from being dead on arrival, if allowed to stand it would undermine the California Environmental Quality Act.

Somehow the document, touted in advance as being an objective analysis of what would be the best route into the Bay Area, became a politicized beauty contest. Of note, about 80 per cent of testimony at the plethora of public hearings wasn't on point to the draft EIR/EIS.

O015-3

Pg. 1 of 4

Pg. 2/Letter to Mr. Daniel Leavitt  
October 26, 2007  
Re: Public Comment on Draft EIR/EIS

"The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment..." (Section 2106.1 of the California Public Resources Code)

Much more detailed information than is presented in the draft EIR/EIS is required for even a program document, as the current volumes under consideration are described by the HSRA. (Guideline 5168)

Ostensibly, the draft EIR/EIS was written, at least if it was in accordance with its title, for presenting objective and detailed rationale under CEQA mandates for choosing a route from the Central Valley into the Bay Area.

O015-4

Case law regarding environmental impact statements and reports, consistent with court decisions under the National Environmental Policy Act (NEPA), persistently uphold CEQA's mandates that the document provide factual basis for decision-making. A key element is the need for presentation of information so enable policy-makers to provide an informed decision. This is especially true if the project under consideration is under the direct control of the governing body considering the EIR, as is the case with the HSRA Governing Board. The EIR/EIS must provide specific and detailed information and analyses so that actions can result that are best for the environment. (See in particular *Western Placer Citizens for an Agricultural and Rural Environment v. County of Placer* (App 3 Dist 2006) 50 Cal Rptr. 3d, 799, 144 Cal App. 4th 890).

Even the most basic of environmental information relevant to any choice among some 21 different corridor options introduced in the document is curiously missing from the text. For instance, other than generalized descriptions of air pollution in the Central Valley and Bay Area, there is insufficient information as to how any of the 21 options would rank in reducing smog caused by tailpipe emissions. At least 60 percent of air pollution in the San Joaquin Valley results from mobile sources, with the largest culprits being Highway 99, Interstate 5 and Altamont Pass, according to the San Joaquin Valley Air Pollution Control District.

O015-5

Pg. 2 of 4



**Comment Letter O015 - Continued**

Pg. 3/Letter to Mr. Daniel Leavitt  
 October 26, 2007  
 Re: Public Comment on Draft EIR/EIS

Moreover, from the outset of legislative authorization (beginning with Senate Concurrent Resolution 6 in 1993) it is clear the reduction in air pollution, reduction in traffic congestion and inhibition of sprawl were to be major objectives of any high-speed rail project. Air pollution generation within the San Joaquin Valley is certainly a problem of significant environmental consequence. In the last annual reporting period, according to the San Joaquin Valley Air Pollution Control District, there were 65 days in which state or federal ozone standards were violated. The California Air Resources Board (CARB) estimates that at least 1,000 deaths annually in the Central Valley, primarily due to respiratory disease, are attributable to air pollution. (See report, "Strengthening the Air Quality Policy Environment in the San Joaquin Valley" 2007).

Even the most basic comparisons of traffic volumes on Pacheco and Altamont passes—a major factor in analyzing tailpipe emissions that produce smog and the potential for reduction through high-speed rail—are missing from the text. However, readily available to the public—and to the HSRA—is the Caltrans website.

The Caltrans website (<http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>) discloses that Altamont currently average 55.48 million trips per year, where Pacheco average 12.96 million trips per year. Thus, Pacheco carries only 23 per cent of the traffic per year on average, compared to Altamont.

Prevalent wind patterns carry smog caused by Altamont tailpipe emissions down the San Joaquin Valley and even into Yosemite National Park, where a third of the conifers below 6,000 feet are diseased, dying or dead due to air pollution. (See "San Joaquin Air Quality Study Policy: Relevant Findings," 31 pp. Published by San Joaquin Valley Air Policy Study Group, November, 1996 under financing of the California Air Resources Board and the San Joaquin Valley Air Pollution Control District).

Descriptions of how smog, further pushed into the San Joaquin Valley due to topography and prevalent weather patterns, is harming national parks is described in "Assessment of Air Quality and Air Pollutant Impacts in Class I National Parks of California," authored by T.J. Sullivan of E&S Environmental Chemistry, Inc. D.L. Peterson of the U.S. Geological Survey Forest and Rangeland Ecosystem Science Center Cascadia Field Station and C.L. Blanchard of Envair in cooperation with the National Park Service's Air Resources Division. April 2001. See also the chapter, "Distribution and Effects on Forests," in the book, Development of Ozone and Air Pollution in the Sierra Nevada, edited by R.A. Minnich, P.E. Padgett and S.V. Krupa, published by Elsevier.

Pg. 3 of 4

Pg. 4/Mr. Daniel Leavitt  
 October 26, 2007  
 Re: Public Comment on Draft EIR/EIS

However, the text of the draft EIR/EIS document carries no comparison of the topographic and climatologic factors particular to both Pacheco and Altamont passes relative to production and transport of air pollution generated by air pollution.

O015-5  
 Cont.

Theory and logic holds that the more automobiles taken off the road the less the air pollution.

Similarly, the numbers of registered vehicles in Merced, Stanislaus and San Joaquin Counties—geographic areas that would be served by an Altamont alignment—far outnumbers those of Merced and San Benito counties—that would be served by a Pacheco alignment. No mention is made in the draft EIR/EIS text of this factor that should be relevant to any decision.

O015-6

Within the basic policy preamble to the California Environmental Quality Act (Section 21001 of the California Public Resources Code) there is the declaration: "The Legislature further finds and declares that it is the policy of the State to:... Take all action necessary to provide the people of this state with clean air and water..."

O015-7

Yet the EIR/EIS text takes a very cavalier attitude toward air pollution when it comes to making a corridor choice from the Central Valley into the Bay Area.

O015-5  
 Cont.

Similarly, flights of endangered condors within the potential Pacheco Pass alignments are ignored.

O015-8

Also given short and inadequate attention is comparative potential for generation of land use sprawl with attendant traffic congestion.

O015-9

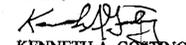
Public consideration of the draft EIR/EIS text was skewed by the failure to adhere to the EIR Guideline requiring the naming of a preferred alternative, even in a program EIR/EIS.

O015-10

Mitigation measures that would have favored Altamont were ignored, such as cellular confinement systems that would enable additional trackage in the wetlands of the eastern San Francisco Bay near Fremont, Newark and Union City. (See "Railroad General Research report: Feature: Roadbed Ballast and Sill Structure. Geoweb Elemental Properties of 3-Dimensional Roadbed Reinforcement Materials" Katsumi Muramoto, Etso Sekine and Naouki Yaguchi) Consistently successful tests have been experienced at the Facility for Accelerated Service Testing at Pueblo, Colorado.

O015-11

Sincerely,

  
 KENNETH A. GOSLING  
 Executive Director

Pg. 4 of 4

Transportation Involves Everyone (TIE)



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**Response to Letter O015 (Kenneth A. Gosting, Transportation Involves Everyone [TIE], October 26, 2007)**

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**O015-1**

Comment acknowledged.

The Authority and FRA acknowledge receipt of comments from Transportation Involves Everyone (TIE). The comment letter is part of the record for this Final Program EIR/EIS.

**O015-2**

Please see Response to Comment O006-3. Please also see Standard Responses 1 and 2.

The Authority and FRA do not agree with these contention that the Draft Program EIR/EIS is fatally flawed or that it would undermine CEQA. Please see responses to comments below.

**O015-3**

No response is necessary for this statement.

The Draft Program EIR/EIS provides meaningful data and analysis to support the identification of a Preferred Alternative in the Final Program EIR/EIS. Rather than offer a judgment as to which alignment alternative would be the best route, the Draft PEIR/PEIS evaluates the impacts and benefits of various alignment alternatives and station location options for the Bay Area to Central Valley. Please see Response to Comment L001-3, and Standard Responses 1, 2, and 3.

**O015-4**

Please see Response to Comment O015-1.

Please see Standard Responses 1 & 2 regarding the level of detail provided in the Draft Program EIR/EIS.

**O015-5**

The Draft Program EIR/EIS provides extensive and factual information that is sufficient for informed decision-making, which is one of the intended uses of this draft document. The Authority and FRA find this information fully sufficient to identify a Preferred Alternative in this Final Program EIR/EIS. Please see Standard Response 1. Please see Response to Comments O007-86 and O007-87 regarding the air quality impacts. Please see Response to Comment O007-21 regarding reduction in vehicular miles traveled and congestion levels.

The Draft Program EIR/EIS presented the regional emissions analysis of the Pacheco Base Build Alternative. The Final Program EIR/EIS presents the regional emissions analysis for the two "base" network alternatives (Pacheco Base, and Altamont Base). This analysis, on a regional level, details the emission burdens generated by each alternative in each of the immediately affected air basins (San Joaquin and San Francisco). The analysis presented in Section 3.3 in the Program EIR/EIS clearly shows a reduction in pollutants generated from mobile sources under the Build Alternative as compared to the No Project Alternative and shows that this reduction is basically the same for either the Altamont or Pacheco Pass alternatives. It is expected that these predicted emission reductions would also be beneficial to air quality in Yosemite.

**O015-6**

The benefits from the proposed HST system depend on how many residents would actually use it instead of driving on intercity trips, not simply the number of registered vehicles in various areas. The expected effect of either the Pacheco or Altamont HST alternatives will be to decrease traffic on most intercity highways while increasing it locally on streets in station areas. Table 3.1-2 in Section 3.1, Traffic, Transit, Circulation, and Parking, shows traffic decreases expected on I-580, I-5, and SR 99 from diversions to HST to be about the same for either the Altamont or Pacheco Pass alternatives,



although there was more decrease from the Pacheco Pass alternative.

**O015-7**

Table 3.3-7 highlights the air quality benefits of the project. Using the benefit rating system established for the project, the Build Alternative is predicted to have medium to high benefits on regional air quality levels. This table will be expanded to include both base alternatives (Pacheco Base, and, Altamont Base).

**O015-8**

Considering that California condors can range up to 150 miles in a day, it is possible that one of the 16 condors currently at Pinnacles National Monument (as of Dec. 2007) (source: [http://www.nps.gov/pinn/naturescience/upload/Condor\\_Status-Dec07.pdf](http://www.nps.gov/pinn/naturescience/upload/Condor_Status-Dec07.pdf)), it is possible that a condor may occasionally fly over Pacheco Pass, similar to the way that condors from the Mt. Pinos area may occasionally fly over cities like Ventura and Bakersfield. However, because no part of the alignment is located within the critical habitat for the species, impacts on this species would be minimal to none.

**O015-9**

The Authority and FRA respectfully disagree with the assertion that the Program EIR/EIS gives inadequate attention to “land use sprawl and attendant traffic congestion.” Chapter 5, and the accompanying technical report, Economic Growth Effects Analysis of the Bay Area to Central Valley Program-Level EIR and Tier 1 EIS, provide a detailed analysis of potential economic growth and related impacts (including traffic congestion). Please refer to Standard Response 4 and Chapter 6 (Station Area Development).O015-10

Consistent with NEPA and CEQA, the Preferred Alternative is identified in this Final Program EIR/EIS, following public comment on the Draft Program EIR/EIS.

**O015-11**

The specific mitigation measures as suggested in the letter will be considered in Tier 2 project-level environmental analysis.



Comment Letter O016 (Florence M. LaRiviere, Citizens Committee to Complete the Refuge, October 26, 2007)

10/26/2007 13:36 6504947640

CITIZENS COMMITTEE

PAGE 01

10/26/2007 13:36 6504947640

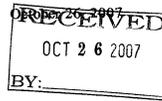
CITIZENS COMMITTEE

PAGE 02



CITIZENS COMMITTEE TO COMPLETE THE REFUGE

453 Tennessee Lane, Palo Alto CA 94306 Tel 650 493-5540 Fax 650 494-7640 e-mail: marsh@refuge.org



Mr. Mehdi Morshed
Executive Director
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814
Fax#: 916-322-0827

Subject: Draft Bay Area to Central Valley High-Speed Train (HST) Program EIR/EIS

The Citizens Committee to Complete the Refuge, consisting of 2,000 members, has an ongoing history of interest in wetland protection, wetland restoration and wetland acquisition. As such, the Committee has taken an active interest in Clean Water Act regulations, policies, implementation and enforcement. We have established a record of providing information regarding possible CWA violations to both the Corps and EPA. We regularly respond to Corps public notices, and inform the public of important local CWA issues. These actions demonstrate our ongoing commitment to wetland issues, toward protecting the public interest in wetlands, and in Section 404 of the CWA. We also respond to CEQA Negative Declarations and Environmental Impact Reports (EIRs). All of these actions demonstrate our ongoing commitment to wetland issues, towards protecting the public interest in wetlands, in Section 404 and 401 of the CWA, and CEQA.

We are submitting comments to urge you to drop consideration of the proposed Pacheco Pass alignment due to significant and substantial impacts to valuable and pristine open space resources, wetlands, and listed and sensitive species habitat. In addition, the proposed alignment would have a tremendous growth inducing impact on undeveloped regions of the Pacheco Pass area encouraging urban sprawl in areas away from existing development.

An alternative that has been suggested for the Bay Area is the Altamont Pass alignment; of prime concern to our organization would be the portion of the alignment that would pass through the Don Edwards San Francisco Bay National Wildlife Refuge, but we would also be concerned about the possible fragmentation or disruption of any San Joaquin kit fox habitat and corridors.

Of the alternatives that have been proposed for the portion of the alignment that passes through the refuge crossing the south end of San Francisco Bay, we would support the Kiesling tunnel alternative, which proposes tunneling under the refuge and the bay. We would still have concerns regarding the approaches to the tunnel on either side of the bay and in particular any impacts that would occur on the eastern and western sides of the bay that are adjacent to areas that have been included in the Congressionally approved refuge expansion boundary:

- existing salt ponds and crystallizers in Fremont and Newark,
Area 4 in Newark (site of the former Whistling Wings and Pintail duck clubs,
the wetlands mitigation areas in Fremont for the Pacific Commons development and the Warm Springs unit of the refuge, and
Ravenswood saltpond complex, Ravenswood Triangle and Carnduff & Kavanaugh lands on the western side of San Francisco Bay.

CCCR comments HSR EIS/EIR

10/25/07

Page 1 of 2

Therefore it is important if this alternative is to be considered, that information regarding the direct and indirect nature, physical extent, duration of any impacts in these areas be fully identified and assessed. We would also have concerns regarding any noise or vibration impacts on existing neighborhoods along this alignment.

O016-5
Cont.

Another alignment that has been suggested and warrants further review is a high bridge alternative. Under this alternative, rather than retaining the existing approach fills (embankments) the current bridge alignment would be completely reconstructed, rather than merely rehabilitated, and the portion of the rail crossing refuge lands would be on piles rather than earthen fill. This would allow the restoration of tidal flows across refuge lands in the vicinity of the rail line. If this alternative is studied further it would be important to assess and propose mitigation for the following types of impacts in addition to those listed above:

- Construction impacts through direct physical alteration of the habitat - how would this be minimized? If a bridge alternative was selected could construction be conducted from the span rather than disturbing the adjacent marsh?
Duration and timing of construction activities and potential impacts on listed and rare species?
The alignment through the refuge is within prehistoric/early historic inner Dumbarton Marsh fragment. Ground disturbance could and would likely increase invasion of non-natives, especially Salsoia, hybrid Spartina, Lepidium (in the area above MHHW), etc. how would this be prevented?
How long would the disturbance last? Would there be any permanent impacts, e.g. access roads, etc?
Indirect impacts associated with construction including, noise, vibration, human disturbance, etc.
What kind of emergency access would be necessary for a bridge alignment, e.g. what happens in the event of a derailment within the refuge?
Shade impacts on existing marsh vegetation?
Maintenance? Cleaning rails? Where does the material cleaned from the rails go and how would introduction into the marsh be prevented?

O016-6

CCCR appreciates the opportunity to provide comments. We urge you to abandon the Pacheco Pass alignment as the preferred alternative; the adverse impacts of the alignment are significant and cannot be mitigated. If the Altamont Pass alignment is considered further, we support the Kiesling tunnel alternative with as long as the areas mentioned above are not adversely impacted.

O016-7

Sincerely,

Florence M. LaRiviere

Florence M. LaRiviere

Chairperson

CCCR comments HSR EIS/EIR

10/25/07

Page 2



U.S. Department of Transportation
Federal Railroad Administration

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**Response to Letter O016 (Florence M. LaRiviere, Citizens Committee to Complete the Refuge, October 26, 2007)**


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**O016-1**

Comment acknowledged.

The Authority and FRA acknowledge receipt of public comments from the Citizens Committee to Complete the Refuge and the Committee's interest in the Clean Water Act regulations, policies, implementation and enforcement.

**O016-2**

Please see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative.

The Pacheco Pass network alternatives are within areas that have undergone human change either through the development of buildings, transportation, or through ranching, farming and other agricultural activities. The alignments were located to minimize impacts on both the built and natural environments. The use of tunnels and elevated sections of the HST system have been included to minimize impacts through open space resources and sensitive habitats. Mitigation strategies are discussed in Section 3.15 in the program EIR/EIS to minimize impacts on sensitive species, habitat, wetlands, and wildlife movement corridors.

**O016-3**

The analysis of this Program EIR/EIS concluded that the Pacheco Pass alternatives would have slightly less growth inducement potential than the Altamont Pass alternatives (please refer to Chapter 5 of the Program EIR/EIS). Please also see Standard Response 4 regarding growth inducement.

**O016-4**

Please see Response to Comment O016-2.

Potential impacts on the San Francisco Bay and the Don Edwards San Francisco Bay National Wildlife Refuge, discussed in Section 3.15, played an important part in the identification of the Preferred Alternative. The Preferred Alternative identified by the Authority is the Pacheco Pass, San Francisco and San Jose Termini. Please see Standard Response 3 and Chapter 8.

Refer to Response to Comment F002-10 regarding the kit fox.

**O016-5**

Please see Response to Comment O016-2.

Comment acknowledged. This is not the Preferred Alternative; however, if it is carried forward to the project level environmental analysis, a more detailed analysis of the direct and indirect, and duration of potential wetland and noise and vibration impacts on the potentially affected areas would be performed.

**O016-6**

Please see Response to Comment O016-2.

Comment acknowledged. This is not the Preferred Alternative; however, if it is carried forward to the project level environmental analysis, a more detailed analysis of the potential construction impacts would be performed. Future project-level analysis would include study of the following:

- Duration and timing of construction activities and associated disturbances
- Examination of potential ground disturbances and shading
- An examination of the operating and maintenance procedures across the proposed bridge to understand what the potential impacts are.



**O016-7**

The Authority and FRA have identified the Pacheco Pass Alignment as the Preferred Alternative for the reasons identified in Chapter 8 of the Final Program EIR/EIS. Please also see Standard Response 3 and Chapter 8 regarding identification of Pacheco Pass as the Preferred Alternative.

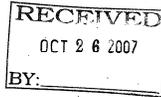


Comment Letter O017 (Bill Allayaud et. al., Sierra Club, California, October 26, 2007)

From:Sierra Club 916 557 9669 10/26/2007 11:02 #792 P.001/002



SIERRA CLUB CALIFORNIA



October 26, 2007

California High-Speed Rail Authority 925 L Street, Suite 1425 Sacramento, CA 95814

RE: Draft Bay Area to Central Valley Program EIR/EIS Comments

Dear Chairman Kopp and Members of the Authority:

The Sierra Club appreciates the opportunity to comment on the Bay Area to Central Valley HST DEIR/S. This letter is a supplement to our detailed comments on the Draft Program EIR/S being submitted jointly with other environmental and rail transit advocacy groups, which we incorporate by reference.

O017-1

The Sierra Club has long been supportive of the concept of high-speed rail, particularly as an alternative to airport expansion. See for example lomapieta.sierraclub.org/HighSpeedRail.html and www.sierraclub.org/sprawl/transportation/highspeedrail.asp. The Club chose to highlight the California High-Speed Rail project as one of 49 worthy transportation projects nationally in our "Smart Choices, Less Traffic" report of 2002. See www.sierraclub.org/sprawl/report02/.

O017-2

It is our hope that the HSR system can be built in a manner that complements the Sierra Club's top priorities goals including: Smart Energy Solutions - combating greenhouse gas emissions and climate change; Safe and Healthy Communities, and preserving America's Wild Legacy. As such, we think the HSR project can help California shift future demand for long-distance transportation to more energy-efficient modes and is less-polluting than new airport or highway expansions. And, we note that there is much greater potential for trains to be powered with renewable energy than there is for airplanes. In addition, we're concerned that proposed airport expansions would result in thousands of acres of fill being added to San Francisco Bay and significantly and adversely affect neighborhoods in the Los Angeles area. High-speed rail would provide an alternative to such airport expansions, reduce greenhouse gas emissions, and promote urban infill through smartly designed stations.

O017-3

Nonetheless we have significant concerns about the important detail of how high-speed rail will connect the Bay Area and the Central Valley. We are concerned that serious flaws in the Draft Program EIR/S do not make clear the significant differences in environmental impacts between the Altamont and Pacheco alternatives, which make it extremely difficult for decision-makers and the public to assess the alternatives. Particularly egregious is the obfuscation of alternatives, through descriptions that are not consistent between sections, figures, and tables. And, there are incomplete and almost "in passing" references in the document to federal and state lands that each alternative traverses or is adjacent to, and a near-complete omission of these important lands and boundaries from the maps provided. This makes it very difficult to assess the potential biological and 4(f)/6(f) impacts

O017-4

1414 K Street, Ste. 500 Sacramento, CA 95814 (916) 557-1100 FAX (916) 557-9669 www.sierraclub.org

From:Sierra Club 916 557 9669 10/26/2007 11:03 #792 P.002/002

October 26, 2007 Page 2 of 2

posed by the HSR project. We understand that the approach to analyzing the project and that the development of transportation segments for modeling purposes was complicated by the requirements of the Bay Area Regional Rail Plan Study. However, the omission of such basic information about these parks and lands is not acceptable.

O017-4 Cont.

Throughout the impacted territories of the Sierra Club, we are unanimously of the opinion that the Altamont alignments for high-speed rail are environmentally preferable to the Pacheco alignments, and we are disappointed that the severely flawed Draft Program EIR/S does not make clear the environmental differences between the two key alignments. High-speed rail in the Pacheco alignment would impact larger areas of wilderness which are relatively untouched and which would be more radically altered by the noise and infrastructure that high-speed rail would introduce.

O017-5

Our environmental allies who work on restoration of the San Francisco Bay have also expressed to us that a new bay crossing could actually present an opportunity to reverse some of the historical impacts to the Bay and the Don Edwards San Francisco Bay National Wildlife Refuge. They are also anxious about the continuing pressures to expand SFO airport runways into the bay.

The Club also believes it is important for the future viability of high-speed rail to have a first phase that serves the population in the upper San Joaquin Valley and Livermore Valley and to provide synergy with needed improvements to regional rail services along this corridor to San Jose and across the Dumbarton corridor. The Altamont route will also make the reality of serving the State Capitol, Sacramento, and this growing area with high-speed rail much more likely in the near term.

O017-6

Again, we appreciate the opportunity to comment and urge the Authority to revise and recirculate the environmental documents to address the serious concerns outline in detail in the referenced longer comment letter.

O017-7

Sincerely, Bill Allayaud Sierra Club California

Michael Bornstein Sierra Club SF Bay Chapter

Melissa Hippard Sierra Club Loma Prieta Chapter Gerald Vinnard Sierra Club Tehipite Chapter

Terry Davis Sierra Club Mother Lode Chapter



U.S. Department of Transportation Federal Railroad Administration

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**Response to Letter O017 (Bill Allayaud et. al., Sierra Club, California, October 26, 2007)**


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**O017-1**

Comment acknowledged.

The Authority and FRA acknowledge receipt of comments from the Sierra Club - California. The Authority and FRA received a letter from Stuart M. Flashman in which he states that he is representing the Sierra Club.

**O017-2**

Comment acknowledged.

The Authority and FRA acknowledge the Sierra Club's support for the concept of High Speed Rail. The Authority and FRA likewise are committed to a proposed HST system that recognizes and incorporates smart energy solutions, reduction in GHGs, safe and healthy communities, and preservation of wildlife and habitat.

As noted in the Program EIR/EIS, the purpose of the HST system is to provide an environmentally friendly alternative to highways or airways for long-distance intercity travel in the State of California. In response to the Sierra Club's request, the Authority Board has directed evaluation of the feasibility of powering the HST system using zero emission sources of electricity. The Authority and FRA are committed to smart growth and urban infill, as evidenced by chapter 6 "Station Area Development" of the Program EIR/EIS document. Please also see chapter 8 and the Summary of the Program EIR/EIS regarding the "Altamont Corridor."

**O017-3**

Please see Response to Comment Letter O007 from Mr. Flashman. The Authority and FRA find that the differences in environmental impacts between the Altamont and Pacheco Alternatives are clearly presented in the Draft Program EIR/EIS. Chapter 2, "Alternatives," of the Draft Program EIR/EIS provides a comprehensive description of the alternatives under consideration and refers the reader to appropriate detailed maps and drawings. A map showing publicly

owned lands is provided as Figure 3.16-1 in this Final Program EIR/EIS. Please see Responses to Comments Lo29-57 and O007-134 regarding the identification and listing of 4(f) and 6(f) resources.

**O017-4**

The Draft Program EIR/EIS recognized the importance of the federal and state lands in proximity to and along the alignment alternatives being considered for the HST system linking the San Francisco Bay Area and the Central Valley. The analysis contained in the program EIR/EIS included the potential environmental impacts, including biological resources and wetlands, of the HST alignment alternatives and stations regardless of land designation. Impacts on resources within and outside of ownership/management boundaries were analyzed and are documented in the Draft and Final Program EIR/EIS. Additional information has been added to the document regarding parks and conservation lands.

**O017-5**

See Response to Comment O007-22.

**O017-6**

In terms of service to the upper San Joaquin Valley, the HST system approved at the conclusion of the Statewide Program EIR/EIS includes corridors and stations for HST service through the Central Valley from southern California to Sacramento, regardless of the Preferred Alternative selected for the Bay Area to Central Valley.

Consistent with the current statewide bond measure for 2008, the Authority Board has selected as its first phase the line from Anaheim to the Bay Area, and has stated its intent to subsequently add service to both Sacramento and San Diego. The first phase of the Board-adopted phasing plan includes development of a test track from Bakersfield to Merced, regardless of whether the Altamont or Pacheco Alignment is selected. Thus, for the initial phase, the



Central Valley is served between Bakersfield and Merced for either alternative.

The Authority recognizes the desire of the Central Valley to be served. While the Pacheco Pass is identified as the Preferred Alternative serving as the primary north/south alignment between southern and northern California, the Authority is working with regional partners on identifying additional improvements in the Altamont Corridor, and correspondingly, the is pursuing high-speed rail bond funds for such improvements.

**O017-7**

The Authority and FRA acknowledge the receipt of the Sierra Club's comments. The Authority and FRA do not find that the environmental document needs to be recirculated. Please see Response to Comment O007-160. Please see Standard Responses 1 and 2.



