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**Comment Letter 0049 Continued**


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James E. Slosson

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James E. Slosson

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**ATTACHMENT E**

The materials in Attachment E suggest ongoing Metropolitan Transportation Commission efforts to coordinate transportation with more efficient land use. HSRA, in turn, must develop specific mitigation measures for certain impacts and should develop specific land use requirements as part of the project to enhance its efficiency and effectiveness and to reduce environmental impacts.

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**Comment Letter 0049 Continued**


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**Memorandum**

TO: Transportation-Land Use Task Force Members                      DATE: July 19, 2004

FR: Valerie Knepper

RE: MTC TOD Study: Res. 3434 TOD Guiding Principles and Policy Approach Options

The purpose of this memo is to provide information regarding MTC staff's current thinking regarding "Guiding Principles" and to describe policy options to detail the MTC requirements for supportive land use policies for programming of Res. 3434 regional transit discretionary funds. Most importantly, the purpose of this item is for MTC staff and our consultants to receive feedback regarding the draft principles and policy options.

**I. Draft TOD Guiding Principles**

The following "TOD Guiding Principles" are intended to provide simple and clear statements that will guide our development of specific policies.

(a) Increase Transit Ridership By Encouraging Higher Density Development Around Stations. One of the key goals of the TOD policy is to increase transit ridership by providing more opportunities for people to live and work in close proximity to key transit stations and hubs. The TOD study will help MTC define minimum housing and employment densities that will maximize potential ridership, and thus cost-effectiveness, for new public transit investments funded under Resolution 3434.

(b) Ensure New Transit Villages are Livable and Vibrant Places. While generating transit ridership is a critical goal for any transit-oriented development policies MTC adopts, we are also looking to affirm that more compact development patterns and higher density residential and commercial growth around transit hubs bring with them livability, green spaces and other key quality-of-life features.

(c) Develop Criteria That Are Tailored. A key concept in defining "supportive land use policies" is to match the land use density and mix of uses to the ridership and access needs of specific transit modes (i.e., heavy rail, light rail, buses, ferries). In addition, policies must take into account the geographic diversity of the region and the variations in urban and suburban settings.

**II. Policy Approaches for Defining "Supportive Land Use Policies" for Res. 3434**

In December 2003, MTC adopted the policy that the programming of regional discretionary transit funds for Res. 3434 projects would require supportive land use policies by local jurisdictions. Indeed, the original Res. 3434 included a requirement for supportive land use

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policies. A major objective of the current TOD study is to develop an explicit and well-founded approach to implement this policy direction.

**(a) Review of Existing Transit Oriented Development Policies**

As a first step in this process, the TOD Study began by reviewing and summarizing policy approaches that support TOD development from both outside the region and from within the region. The consultants have developed a draft summary that reviews several important existing transit oriented development policies, and will provide a brief summary to you. In addition, they will discuss lessons learned from this review that appear relevant to the development of policies in the Bay Area.

**(b) Conceptual Policy Approaches**

Based on the guiding principles above and staff review of existing TOD policies, the following basic policy approaches can be considered. MTC staff anticipates including more than one policy option in the draft T-2030 (MTC's next regional transportation plan), to be released for public comment in the fall of 2004. (Please note that there are numerous and important variations and details needed to flesh out these approaches, which will be the subject of further discussions, but we are requesting your feedback on basic policy options at this point.)

**1. Option 1: Transit Ridership Requirements**

The most common approach by transit agencies to requirements for supportive land use policies has been to require that the station and/or corridor generate a target level of ridership. The level of ridership threshold and the limitations of other forms of access implicitly point to a level of needed density immediately around transit stations/hubs to satisfy the requirements/be highly ranked for this criterion. This basic approach, with important additional features, is used by the Federal Transit Administration for new transit starts using federal funds and by BART for achieving a recommendation to move forward into later stages of development. Given that land use development takes time, this approach may require progressively more concrete policy, regulatory and legal commitments by local jurisdictions to support achievement of the ridership levels.

**2. Option 2: Density Requirements**

Another approach is to directly require target levels of land use development matched to the needs of the proposed transit mode (i.e., heavy rail requires more ridership and thus would require higher levels of density than would light rail). This approach defines requirements closer to the control of local jurisdictions – i.e. land use planning and zoning controls. Density requirements can be defined in terms of residential density (e.g. 40 units an acre) or the number of people located around a station/corridor (e.g., 20,000 people within 1 mile). It can also be defined in term of residents only, or both residents and workers. As above, this approach may require progressively more concrete policy commitments by local jurisdictions over the timeline of the project.

**3. Option 3: Point System Incorporating both Density and Design Requirements**

Given that MTC has a strong commitment to improving the livability of our communities, and the positive influence of the design of places on walk and bike access to transit stations /hubs, another approach would be to include both targeted levels of density, (to be defined as per the discussion above) and design requirements that facilitate non-auto access to transit stations/hubs.

**Comment Letter 0049 Continued**

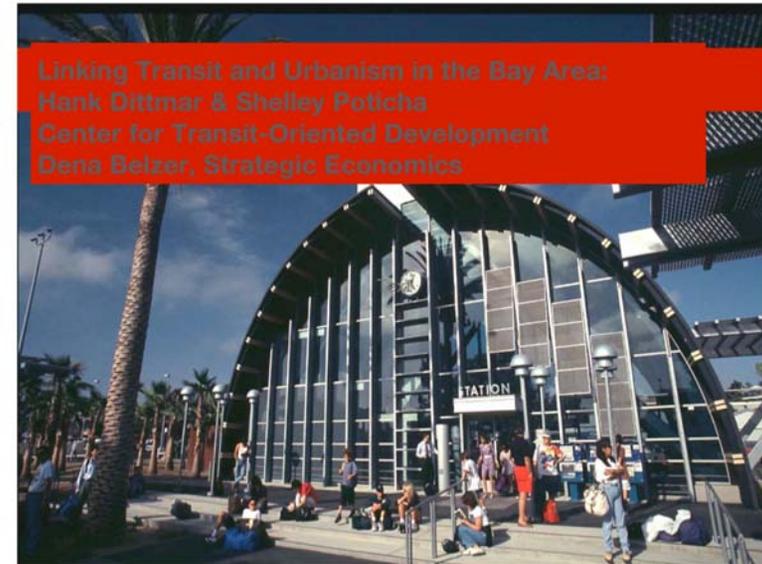
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These factors would be combined into a point system that would reward both the level of development and also design features such as connecting streets and sidewalks, bike routes directly into stations, landscaping designed for pedestrians, and facilitation of pedestrian scaled retail and other activities.

4. Option 4: Matching Place Types and Mode

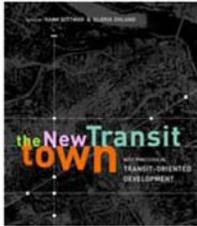
Different transit stations play different roles in the regional transit system, and while each station must generate sufficient use to be justified, and the entire corridor must generate sufficient use to be cost effective, the type of use may differ from station to station. These different patterns of use are termed "types" and include as basic types urban downtown, suburban center, and suburban village. Each of the types of transit modes (e.g. heavy rail, etc) interacts with each of the place types. For example, a heavy rail system in an urban downtown may have very high ridership levels by serving as an employment center, and may not have much residential use in the proximity. On the other hand, a light rail station in a suburban center may have high mixed use, while in a suburban village may have high residential densities. This approach would establish development requirements for types of transit and place type combinations.

We look forward to your input, ideas and recommendations.



**Comment Letter 0049 Continued**

**The Center for Transit Oriented Development**



- A project of Reconnecting America in collaboration with Center for Neighborhood Technology, Strategic Economics and local partners. Exec Director: Shelley Poticha
- A collaborative, performance based approach to making TOD succeed
- Create a national marketplace for TOD, working with transit operators, developers, investors and communities.
- “Bring TOD to scale” in 4-5 metro regions
- <http://www.reconnectingamerica.org>

**Transit Contributes to the Sustainable Metropolis**

Transit and transit-oriented development work in a context of:

- Location Efficiency.
- Expanded Mobility, Shopping and Housing Choices.
- Financial Return and Value Recapture.
- Balance Between Place and Node



Comment Letter 0049 Continued

### Principles for Making Transit Compete

- To succeed, passenger transport must emulate the qualities associated with the auto:
  - Frequency
  - Reliability
  - Speed
  - Convenience
  - Ease of Use



### A note about modes

- Much time is wasted in the debate about bus or rail: both are needed, and it depends on setting.
- If goal is development impact, developers want competitive travel time, identifiable station, high quality design.

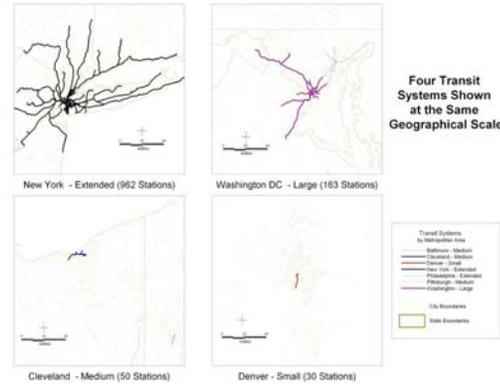


Comment Letter 0049 Continued

Transit Modes and Applications

Mode	Application & Setting	Station Spacing	Technology	Examples
Rail Rapid Transit: Fully grade separated up to 80 mph	High density corridors	1/2 mile 1 mile	Electric	MARTA in Atlanta, BART in Bay Area, CTA, Washington Metro
Ferry Overwater transit 25-40 knots	Crossing river, Bay	Usually two stations	Diesel, wave jet	Golden Gate Ferry; Washington State Ferry
Commuter Rail Rail locomotive, rail ROW, up to 100 mph	Suburb to center city	Limited stations, collection & distribution downtown	Diesel, Electric, Dual Mode	SEPTA, Philadelphia METRA, Chicago Caltrain, SF Bay Area
Light Rail Self propelled rail car in both segregated right of way and street running.	Wide variety of applications: urban to suburban	Short to Long: 1 mile to 1.4 mile	Electric, DMU	Sacramento Portland Salt Lake City Boston green line
Streetcar/Tram Self-propelled car running in street, both modern and vintage	Downtown, urban circulators	Block to block	Electric	Portland Streetcar F Line San Francisco Memphis
Bus Rapid Transit Rubber-tired vehicles on fixed routes with exclusive land or separated roadway (busway)	Less dense environments, urban to suburban, may be a building block to rail	Limited stations, short to long	Diesel, Natural Gas	Brisbane Pittsburgh Silverline, Boston
Bus Transit Rubber tired vehicles operating on fixed routes in mixed traffic	All settings, as workhorse of transit : connection to rail or BRT, local transportation	Frequent	Diesel, Natural Gas Buses	Most cities
Paratransit Small vans operating on a demand responsive basis, often for specialized services	Suburban or rural environments, or for specialized transportation	On-demand	Vans	Most cities

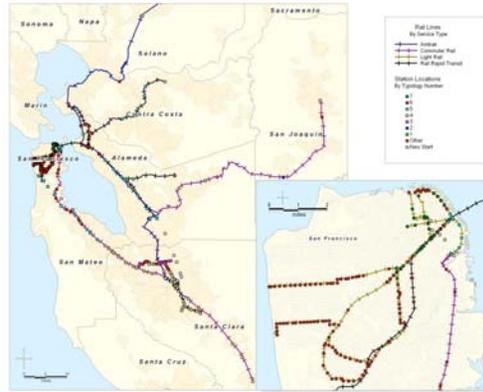
Network Coverage is Key



**Comment Letter 0049 Continued**

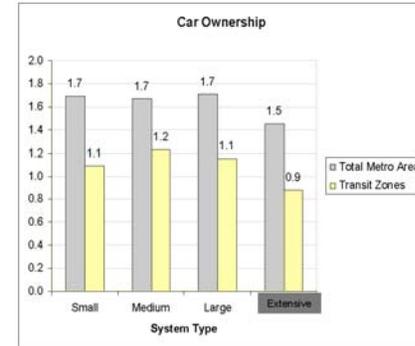
**The Bay Area Exceeds the National Average in Clustering Population Near Transit**

- Nation: 12 % of the Population in Metro regions live in Transit Zones
- Nation: 14 million persons; 6 million households
- Bay Area: 17% of the population, or close to 1 million people; over 422,000 households.



**Car Ownership Rates are Lower in Transit Zones in regions with more extensive transit networks**

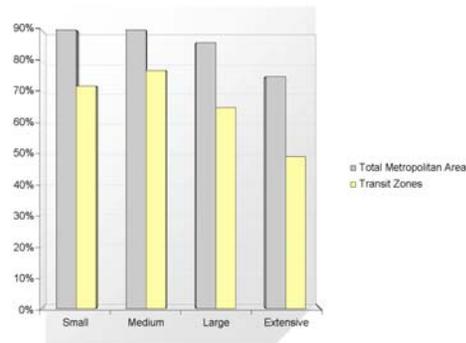
- Nationally: Residents within a 1/2 mile of fixed guideway transit own an average of 0.9 cars, compared to 1.6 cars/household for Metro regions
- Bay Area: Comparable to national standards: 1.3 vs. 1.7 cars/household for region as a whole.



**Comment Letter 0049 Continued**

**Transit Zones Have Fewer Residents Commuting by Car, particularly in regions with extensive transit networks**

- Nationally: 54 percent of Transit Zone residents commute to work by car, as compared to 83 percent in the metro-regions as a whole.
- Bay Area: 62 percent of Transit Zone residents commute by car to work, compared with 82 for the region as a whole.



**A Typology of TOD Places**



**Comment Letter 0049 Continued**

**A Typology for TOD: Density and Service Levels**



TOD Type	Land Use Mix	Minimum Housing Density	Regional Connectivity	Frequencies
Urban Downtown	Office Center Urban Entertainment Multifamily Housing Retail	>60 units/acre	High Hub of Radial System	<10 minutes
Urban Neighborhood	Retail Class B Commercial	>20 units per acre	Medium Access to Downtown Subregional Circulation	10 minutes peak 20 minutes offpeak
Suburban Center	Primary Office Center Urban Entertainment Multifamily Housing Retail	>50 units/per acre	High Access to Downtown Subregional Hub	10 minutes peak 10-15 offpeak
Suburban Neighborhood	Residential Neighborhood Retail Local Office	>12 units/acre	Medium Access to Suburban Centers and Access to Downtown	20 minutes peak 30 minutes offpeak
Neighborhood Transit Zone	Residential Neighborhood Retail	>7 units/acre	Low Access to a Center	25-30 minutes Demand Responsive

**Creating a policy for conditioning transit funding on transit-supportive land uses**

- Task 1: Project Start-Up
- Task 2: Literature Review (CTOD and GB Arrington of PB)
- Task 3: Regional Analysis of the Potential for TOD
- Task 4: Bay Area TOD Opportunities
- Task 5: Develop Regional TOD Policy
- Task 6: Case Studies
- Task 7: Final Report

**Comment Letter 0049 Continued**

**Findings from the Literature Review**

- The Question: What is the State of the Practice in linking land use to transportation investment decisions?
- Three Types of Approaches:
  - Leveraging Land Use for Transportation Investments
  - Gradually Re-Shaping Land Use for Transportation
  - Conditioning Project Funding on Land Use Activities



**Leveraging Land Use for Transportation Investments**

- Examples:
  - Federal New Starts Land Use Criteria (Existing and Proposed)
  - Portland's Westside Light Rail
  - BART System Expansion Policy (Val Menotti to present)
  - Bypass and Interchange Management



**Comment Letter O049 Continued**

**Example: Federal New Starts Land Use Criteria (Existing)**

- Land use is one of three factors (user benefit and strength of local financial commitment are others)
- For a project to advance it needs a combined rating of "medium"
- Land use = concentrations of population and employment + supportive local and regional policies.
- Given strong competition for FTA \$\$, communities seek to maximize strategies that concentrate development around transit stations to "seek an edge in the rating program"

**Example: Federal New Starts Land Use Criteria (Proposed Revision – ULI)**

- Raise the bar, encourage "high" ratings
- Get land use considerations incorporated into the process earlier
- Develop a threshold or pass/fail criteria, as with User Benefit and strength of local financial plan.

**FTA / ULI New Starts Panel**

**Recommendations for Weighting Land Use**

- 20 points: Existing Land Use (max 33 points)
- 65 points: Plans & Policies (max 33 points)
  - Regional 10 points
  - Corridor 15 points
  - Zoning 20 points
  - Incentives 20 points
- 15 points: Performance (max 33 points)

**ULI Panel Recommended Land Use Thresholds**

- Late P.E.
  - Jurisdictional IGAs / MOUs covering 50% corridor population
  - PASS/FAIL 1st/2nd
- Final Design
  - Adopt interim or final codes
  - PASS/FAIL 1st/2nd
- Full Funding Grant Agreement (FFGA)
  - Adopt final codes before FFGA approval
  - PASS/FAIL 1st/2nd

**Comment Letter 0049 Continued**

**Gradually Re-Shaping Land Use for Transportation**

■ Examples:

- Atlanta Livable Communities Initiative
- Chicago RTA's Regional Technical Assistance Program
- State of Maryland's Priority Funding Areas Act

■ Findings:

- Atlanta and Chicago are like MTC's TLC Program
- State of Maryland is different than either the State of California or the Bay Area



**Conditioning Project Funding on Land Use Activities**

■ Examples:

- VTA Community Design and Transportation Program
  - Chris Augustine to present
- Portland METRO TOD Implementation Program
  - Federal Transportation Funds are directly invested in TOD projects
- New York Number 7 Line
  - Linking rezoning to transit project construction
- Portland Airport MAX
  - Public/Private Partnership to Build Airport LRT extension
- Portland Streetcar

**Comment Letter 0049 Continued**

**Example: Portland Streetcar to the Pearl District**

- Streetcar investment used to catalyze redevelopment of 90 block abandoned warehouse district/brownfield
- Streetcar began service in 2001 and runs 2.4 miles through Downtown and into the Pearl District
- Ridership is over 5,000 daily
- Allocation of public funds linked to "upzoning" (from 15 du/ac to 131 du/ac)
- 1,300 new housing units in 2000 and up to 5,500 units (10,000 residents), 21,000 jobs and 1m. S.F. retail
- Affordable housing, urban parks, and streetscape/utility improvements exacted from developer.



**Conclusions: Implications for the Bay Area**

- **Flexibility and Local Control is Important:** How can the agency set performance criteria in a manner that meets its own ridership, livability, and cost effectiveness goals, yet allow local jurisdictions the flexibility to address land use issues in their one way?
- **Don't Create a Burdensome System:** Nest the effort local jurisdictions must undertake inside current MTC processes and link with existing programs by local transit agencies (e.g. BART and VTA)
- **Tie Expectations to Reality:** Set benchmarks for performance (planning, regulation and development) to what local governments (and the market) can realistically provide at different stages in the process.
- **Threshold or Rating System:** Simply setting a pass/fail requirement tends to deliver the lowest common denominator. A performance-based system rewards excellence.
- **Think About the Long Term:** Politics and markets change over time. While the policy needs to be sensitive to change, expectations for performance ought to be evaluated once the transportation investment is made.
- **What is a Sufficient Measure?:** How to include both the density/ridership expectations and the place-making elements that allow TOD to work.

Comment Letter 0049 Continued



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Hi, eddymoore August 9, 2004

Palmdale On Board With High-Speed Rail Plan
The pro-development city has spent \$500,000 on efforts to be part of the 700-m

By Jia-Rui Chong, Times Staff Writer

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Up and down the state, people have complained that they don't want the planned bullet train from San Diego to Sacramento thundering through their communities.

But not in Palmdale.



The Antelope Valley city has spent more than half a million dollars on lawyers, public relations specialists, and economic and geological studies to persuade state officials to bring the high-speed trains its way.

"Quite frankly, we're prepared to go further to win the alignment," said Palmdale Mayor James C. Ledford Jr.

Residents near other stretches of the proposed 700-mile route — in Silicon Valley and near Stockton, for example — have complained to the California High-Speed Rail Authority that they don't want 220-mph trains with horns blaring barreling through their neighborhoods.

No one voiced any such concerns about the proposed Antelope Valley

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route — one of two paths being considered in the region — at the most recent public hearing in Los Angeles in June.

Officials in pro-growth Palmdale believe the train would bring an influx of business people to work in new office complexes and would thrill commuters who could zip home to Palmdale from downtown Los Angeles in 20 minutes.

Violet Talavera's story is typical of many Palmdale residents. Talavera, an accountant, moved to the city 10 years ago to escape city life but hated the 1 1/2 -hour drive to Los Angeles.

"When I want to go below, I don't want to drive," she said. "That's part of the reason my own business here, so I wouldn't have to commute."

In addition to the convenience of a train, Talavera believes it would spur development here gain more clients. "The more houses are built, the more business we'll have."

Palmdale, with 130,000 residents, occupies about 65,000 sparsely developed acre Mojave Desert in northern Los Angeles County.

Since the Antelope Valley Freeway opened in the 1960s, the town has been friendly developers. Luxury homes in gated communities with names such as "Pacific Rer big-box shopping plazas with espresso cafes seem to spring up every few months. vehicles with Harry Potter stickers and shiny trucks with vanity plates dominate the pothole-free roads.

But the Antelope Valley is the fastest growing part of Los Angeles County, and it chokes freeways for hours in the morning and evening. Palmdale officials believe a train would help relieve the congestion.

California began work 11 years ago on the high-speed rail link, which would whip from Los Angeles to San Francisco in 2 1/2 hours, and has spent \$30 million on the bond to pay for the first phase of the \$37-billion project — the leg from Los Angeles to San Francisco — is slated for the ballot in fall 2006. Extensions to San Diego and Sacramento follow. It would be decades before passengers could climb on board.

For the trip between Bakersfield and Los Angeles, rail authority board members are considering two paths through the Tehachapi Mountains. The straightest route would Golden State Freeway along the Grapevine. The alternate route would hook east into Antelope Valley, adding about 40 miles and 10 minutes to the trip.

The staff hopes to recommend a route by year's end.

A Palmdale representative has attended every meeting since the high-speed rail effort in the last 12 months, the city has stepped up its campaign.

In presentations before the rail board, environmental and geological consultants here Palmdale have argued that the Golden State Freeway route would cost more and be built because the rock there is weak and the tunnels would have to be stabilized.

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The city also brought in a smart-growth expert who testified that without a transit railroad between Los Angeles and Bakersfield, Bakersfield would become like a suburb of Los Angeles, and suburban sprawl would replace rich agricultural land. A Palmdale spokesman argued, would encourage growth in a place that is better suited for development.

At the June public hearing in Los Angeles, rail authority Executive Director Mehner said with a laugh: "I think we've had more help from the city of Palmdale than any other city in the state."

"Whether we wanted it or not," quipped board member Ron Diridon.

The city's high-priced efforts appear to be paying off.

Palmdale has garnered support for the Antelope Valley route from the county's Metropolitan Transportation Authority, several congressmen, and cities including Los Angeles and Chowchilla.

Some rail board members have called Palmdale's presentations "very impressive."

It wasn't always that way.

"The authority had a strong bias for the Grapevine alignment," said Stephen H. W. Palmdale's assistant city manager. "I believe it was based on information that was well researched. We have provided that research and background."

The city, which has a \$40-million annual budget, has paid for its campaign with sales taxes earmarked for public transit.

"If it's a sure thing, \$500,000 will be insignificant compared to the benefit we would get from John Brooks, a transportation analyst for the city who has books on lobbying such as "Yes" on his office shelf.

Even opponents of the Palmdale route call the city's tenacity "brilliant."

Alan C. Miller, executive director of the Train Riders Assn. of California, a Sacramento group that monitors intercity train projects, said he did not agree with all of the Palmdale researchers' findings. But he said he admired the thorough and upfront approach of the city.

"They're definitely convincing a lot of people that Palmdale is the way to go," Miller said. "That's probably why they keep spending money."

Palmdale officials see high-speed rail as part of an ambitious makeover that will transform the city to other parts of Southern California.

The city has lobbied for an east-west freeway to Victorville and a magnetic levitation rail could connect the city to Los Angeles.

The city has already cleared land for a \$10-million station on the Metrolink corridor between Acton and Lancaster. Expected to open next year, it will also serve as a hub for taxis, bicycles and a tram to Palmdale Airport. The bullet train, if it's routed through the area, may also pull into this station, or it may run through Palmdale Airport.

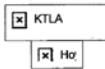


Comment Letter 0049 Continued

Palmdale On Board With High-Speed Rail Plan

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- Find a Job
- Find a Car
- Find a Home
- Find an Apartment
- More Classifieds
- Place an Ad
- Newspaper Ads
- Grocery Coupons
- Personals
- Times Guides
- Recycler.com
- Partners



Palmdale officials said they have encountered little resistance to a high-speed rail city is so pro-development that it voted overwhelmingly about two years ago to allow hangar-sized Super Wal-Mart to be built even though, at that time, there was already a sized Wal-Mart.

Marta Williamson, 57, who lives near the site of the new Metrolink station, is one of few opponents.

She worries that city officials might seize homes in her neighborhood or that private might take over. In her neighborhood, once known as "Tortilla Flats" because it was an area in which people of color were allowed to live, 40% of residents have a low income, she said.

"They want to build an all new city here," Williamson said. "They want big industrial bucks, even if they have to squash people to get it and destroy an area with historical value."

Jose A. Rodriguez, a retired construction worker who was recently shopping at the Valley Mall, said he hoped the rail link would be built, but he shared Williamson's concerns about the urbanization of Palmdale.

If a high-speed rail stop brings high-rise apartments and lots of strangers coming to the area, Rodriguez said, "I'm going to move someplace else."

Mayor Ledford said that Palmdale officials, knowing many of its residents would move to escape the crowds, would do a careful job of planning.

"There's good growth and bad growth," he said. "We're not going to be another Silicon Valley."

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Published April 2, 2004, in the New York Times

Bullet Train Remakes Map of South Korea

By James Brooke

PUSAN, South Korea, April 1 -- Speeding through patchwork landscapes of rice paddies and 20-story apartment buildings, a fleet of blue and gray bullet trains made South Korea decidedly smaller on Thursday.

With sleek new French-designed trains hitting 185 miles an hour, 100 miles an hour faster than older trains here, the new service is already reworking the face of this nation, prompting airlines to cut scores of domestic flights and **sending real estate prices soaring in backwaters suddenly seen as future suburbs of Seoul**, a capital with Tokyo-level apartment prices.

On the world stage, the bullet trains herald South Korea's coming of age. The next generation of high-speed locomotives under development here is called G7, a clear nod to Korea's ambition to join the Group of Seven industrialized nations.

"Following Japan, France, Germany and Spain, we have become the fifth country to run a high-speed train," the acting president, Goh Kun, said on Tuesday at an inauguration ceremony for the service at Seoul Station. This newly rebuilt terminal of soaring steel and sunlit glass is part of a five-year, \$1 billion program to build 12 bullet train stations. When the network is complete, in 2010, the 18-year project is expected to have cost about \$17 billion, the largest civil engineering undertaking in Korean history.

High-speed rail, for 40 years a Japanese preserve, is spreading in middle-class Asia as a glut of vehicles slows traffic. In October, Taiwan is to inaugurate a Japanese-built, 210-mile bullet train between Taipei and the southern port of Kaohsiung. By year's end, China is expected to choose a foreign partner to help build an 807-mile high-speed link between Beijing and Shanghai, which could cost \$12 billion by 2008. One bidder is Alstom, the French company that provided most of the technology for South Korea's new train.

The new era for South Korea began on Thursday with the start of high-speed service on the first three-quarters of the 253-mile distance from Seoul to here.

In 1970, South Korea showed its industrial ambitions with its first



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

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**Comment Letter 0049 Continued**


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limited-access highway, along the same corridor. But in South Korea, where 48 million people live in an area the size of Indiana, traffic jams now cost the economy about \$20 billion a year, largely in lost working hours. While South Korea is renowned for having nearly universal high-speed Internet access, highway speeds can be torturous.

"You can't tell how long it will take to drive -- four to six hours minimum," Lee Sook Jeong, a 24-year-old student who hopes to teach English, said of the drive from Seoul to Pusan, her hometown. Relaxing on Thursday in an airplane-style seat on the ride of 2 hours and 40 minutes, she said, "This fast train is cheaper and it's better than planes."

South Korea's goal is to become a business and logistics hub for northeastern Asia. A crucial part of this vision is the high-speed train, officially called Korea Train Express, or KTX. South Korea, the world's fourth-largest oil importer, has high gasoline prices, because all its oil is imported. For the 180-mile drive to Seoul from Taegu, the nation's third-largest city, gas and tolls run \$40, while the train is just \$35.

High-speed trains could triple passenger traffic on the nation's main line, between here and Seoul, to half a million passengers daily, according to one study. And with the old tracks freed of passenger trains, rail freight to and from this port could increase sevenfold, to three million containers a year.

Korail, the state railroad operator, charges about 25 percent less for tickets than airlines do. The one-hour air hop from Seoul to Pusan may be faster -- KTX trains promise to do it in less than two hours -- but air travelers have to factor check-in time and travel time to airports.

In a rare victory in modern times for trains over planes, airlines cut 70 percent of flights from Seoul to Taegu and 21 percent of flights between Seoul and here.

To compete, Korean Air said it would cut check-in times in half and would serve hot muffins to early-morning fliers. But the future looks bleak for domestic air travel.

In contrast, Japan's Nozomi super-express trains between Tokyo and Osaka are locked in a price war with airlines. Last fall, after the Central Japan Railway Company invested \$900 million in a new Shinkansen terminal for southwestern Tokyo, Japan Airlines representatives walked through the station, distributing leaflets that read, "Dear Nozomi, I'll arrive at the destination first."

Japanese airlines have taken some market share away from bullet trains in recent years. But South Korea's domestic airports are resigned to reinventing themselves as international conduits. Last week, Kimhae Airport in Pusan announced an ambitious plan to seek as many as 72 new international flights, largely to the United States and Europe.

High-speed rail is expected to accelerate another lifestyle change in this country, long notorious for a "develop at any price" work ethic. Starting in July, South Korean companies are to shift to a five-day workweek, from five and a half.

This city, known for its beaches and islands, is forecasting a 30 percent jump in foreign tourist arrivals this year, to two million. To cater to day-trippers, sightseeing companies are shifting tours to start at the refurbished railroad station. Mokpo, another seaport that is the terminus of the other high-speed branch, is forecasting a 60 percent jump in tourists.

"When the five-day workweek is phased in, people will have more time for leisure, for long weekends," Guy Godet, general manager of the beachfront Pusan Marriott Hotel, predicted here on Thursday. Foreseeing that South Koreans will develop a taste for weekends, Korail is scheduling 122 bullet trains between here and Seoul on weekends, and 104 on weekdays.

In another shift, the high-speed trains are pushing the range of Seoul's suburbs. In Taejon, real estate prices doubled last year in anticipation of commuting times that have been cut to 49 minutes from an hour and a half.

"The high-speed railway will ease overpopulation in the metropolitan areas across the country by encouraging businesses to move to now-provincial areas," The Korea Times said in an editorial on Thursday. "It is certain to emerge as the key means of long-distance transportation, easing chronic traffic on the two main expressways and greatly cutting transport costs for business."

As real estate prices rise, urban planners predict that new service by the fleet of 46 high-speed trains will stretch Seoul into an oval-shaped megalopolis. In Japan, bullet train service has bolstered Tokyo and provincial cities where trains stopped. Greater Tokyo has a third of Japan's population, while greater Seoul has almost half of South Korea's.

The population pressure on Seoul may be eased by cheaper real estate in

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**Comment Letter 0049 Continued**


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commuting range and by the government promise to move the capital to a more centrally situated city along the bullet train route.

On Thursday, despite all the balloons and celebrations, some passengers still complained. In Car 12 of the 10 a.m. nonstop from Seoul, several seat rows were facing backward, the drop-down television monitor did not show the train's progress, and there was no hot coffee.

"The seats are quite small, and for me, with a belly, it's a little uncomfortable," said Cho Sang Yoon, an amply built 38-year-old software engineer from Seoul.

**BAY AREA TRANSIT ORIENTED DEVELOPMENT (TOD) STUDY**

PURPOSE, KEY QUESTIONS AND STUDY APPROACH

**Study Purpose**

The Transit Oriented Development (TOD) Study will assess the opportunities, benefits and barriers for increased levels of TOD in the San Francisco Bay Area, and help define MTC's policies in support of Bay Area TODs. Specifically, this study will recommend policies for conditioning regional discretionary funds under MTC's control for Resolution 3434 transit expansion projects on the demonstration of supportive land use policies by local government around transit stations and along key transit corridors. This direction was adopted in principle as part of Resolution 3434 and reaffirmed in the Commission's approval of the draft five-point transportation-land use platform in December 2003. This study will play an instrumental role in defining and implementing this policy, and will be conducted in close partnership with ABAG, transit agencies, local governments and other interested stakeholders.

**Key Questions and Study Approach**

The following key questions will be addressed in the study:

**Question 1** - How much opportunity for TOD exists in the Bay Area, what kinds of opportunities are there, and where are they? What does the best-case scenario for TOD look like regionally? What different types of opportunities for TOD are there in the region?

- *Work with ABAG to estimate the potential regional size and impact of TOD in the Bay Area. Summarize current, future and "best case TOD" conditions next to transit stations and in transit corridors in the Bay Area, including demographics, land use conditions, local policies, and transit ridership impacts. Identify types of TOD opportunities in the Bay Area by transit mode and other characteristics.*

**Question 2** - What policies to support transit oriented development are being used in other areas of the country, as well as within the Bay Area?

- *Summarize regional policies to support TODs, including different regional policy approaches and incentive programs from outside the Bay Area, and relevant policies from within the region.*

**Question 3** - What are the components of an effective regional policy to support TOD in the Bay Area?

- *Assess the lessons learned from other regions and from within the Bay Area.*
- *Assess the existing transportation and land use planning processes within our region, and the unique characteristics and diversity of the Bay Area.*
- *Propose policy planning approaches that more closely link regional transit investments with corresponding levels of local land use development policies.*

**Question 4** - How do we test and evaluate the potential policy approaches as proposed?

- *Develop and review the proposed approach with technical advisors, policy advisors, and the public.*
- *Conduct case studies with local jurisdictions to analyze the effectiveness of the proposed policies in detail. Refine the policy approach based on partner feedback and further analysis.*
- *Refine the policies based on the feedback and findings from the case studies.*

**Question 5** - What is the objective of the TOD Study?

- *Recommend policies for conditioning regional discretionary funds under MTC's control for Resolution 3434 transit expansion projects on the demonstration of supportive land use policies by local government around transit stations and along key transit corridors.*

**Comment Letter 0049 Continued**

**BAY AREA TRANSIT ORIENTED DEVELOPMENT (TOD) STUDY**  
PROJECT SCHEDULE (abbreviated)

Task #	Task Description	Completion Date
1	Refined project scope and schedule	June 1, 2004
2	Summary of policy approaches/ incentive programs from outside and within the Bay Area to support TODs. Lessons learned relevant to MTC policy development.	June 18, 2004
3	Analyses of land use and demographics (current, future and "best case TOD") conditions and plans proximate to transit stations/hubs/corridors <ul style="list-style-type: none"> <li>• Population, household and employment information in the areas immediately proximate to current and future transit stations, hubs and corridors for existing, forecast future, and "Best Case TOD" scenarios</li> <li>• Planned land use from local General Plans proximate to transit</li> </ul>	August 30, 2004
4	Types of Bay Area TOD opportunities and relevance to development of policies <ul style="list-style-type: none"> <li>• Types of Bay Area TOD opportunities, distribution of TOD opportunity types, and the relevance to the development of MTC policies.</li> <li>• Issues and opportunities relevant to each type of TOD opportunity, and implications for supportive regional policies.</li> <li>• Regional market conditions for development in transit corridors / stations of the regional "Best Case TOD" scenario.</li> <li>• Estimate of regional transit ridership impacts of the "Best Case TOD"</li> </ul>	July 30, 2004
5	Overall regional policy approaches to support matched development of land use and transportation <ul style="list-style-type: none"> <li>• Potential policy approaches including incentives and performance measures.</li> <li>• Potential performance measures for minimum densities and intensities for the programming of transit expansion funds under MTC's Resolution 3434 on supportive land use policies by local jurisdictions.</li> <li>• Effective approaches for achieving supportive local land use policies.</li> </ul>	August 27, 2004
6	Case studies analyses. For each location: <ul style="list-style-type: none"> <li>• Existing conditions and current plans, report on site tour and discussions with local planners and interests</li> <li>• Summaries of opportunities, including the market assessment and land use potential.</li> <li>• Summaries of the relative ridership estimates from TOD.</li> <li>• Recommended solutions or approaches to address any impediments to development of TOD</li> <li>• Recommending refinements to MTC's policy approach.</li> </ul>	April 30, 2005
7	Final Report, PowerPoint presentation, Briefing Book	June 1, 2005

Knepper

11/2/2004

**Response to Comments Bay Area Open Space Council, et al., August 31, 2004 (Letter O049)****O049-1**

Please see standard response 3.15.2 and standard response 3.15.13 regarding the general level of detail in this Program EIR/EIS and the anticipated more detailed project-level, Tier 2 studies. Please see response to Comment O042-1 for more information on the purpose of the Program EIR/EIS and the subsequent studies. The co-lead agencies believe that the Program EIR/EIS contains sufficient information and analyses for the decisions made as part of this document. Please see response to Comment O064-08 in regards to suitable mitigation measures. In addition, further clarification and description of the design features of the proposed project and further discussion of proposed mitigation strategies have been added to the Final Program EIR/EIS in Chapter 3. Please see Chapter 6A and the Summary of the Final Program EIR/EIS in regards to the preferred HST alignment and station locations.

Please refer to standard response 3.15.13 in regards to the level of detail of the Program EIR/EIS process and Section 1.1 of the Final Program EIR/EIS document. The mitigation strategies described in the Final Program EIR/EIS represent mitigation menus for decision-makers to consider. Commitments to specific mitigation measure will come in decisions on the program document and in the future, more specifically as part the decisions on project-level documents, should the HST proposal move forward.

**O049-2**

The co-lead agencies believe the Final Program EIR/EIS meets the requirements of both CEQA and NEPA, including the Summary section. Conclusions regarding significance of impacts before and after mitigation are presented in Section 7, "Unavoidable Adverse Environmental Impacts". Tables describing the HST alignment and station choices are included as Section 6, "High-Speed Train Alignment Options Comparison". This section is a "summary chapter", which presents in table format a summary of the data

presented in Chapter 3 and in the supporting technical documents so that alignment and station comparisons can be made between the various HST design options. Given that the HST Alternative is over 700-miles long and that thousands of miles of alignment options have been investigated, it is not practical to place all the information suggested by your comments into a single "summary chapter". Section 6 is over 100 pages in length (not including the many pages of figures). The preferred HST alignments and potential station locations and the rationale behind their identification are presented in Chapter 6A of the Final Program EIR/EIS document.

**O049-3**

Section 2.6 of the Program EIR/EIS describes the No Project, HST, and Modal alternatives. The description of the HST Alternative includes key engineering and operations aspects and references additional technical documents. For the Final Program EIR/EIS, Section 3.18 has been added which includes a description of construction practices and discussion relating to potential construction related impacts. Potentially significant environmental impacts are addressed in Chapter 7. Chapter 3 summarizes the potential environmental impacts of the No Project, HST and Modal Alternatives. The co-lead agencies believe that the Final EIR/EIS presents sufficient information to accurately and thoroughly describe the proposed project and actions. However, it is neither necessary nor practical to include all the technical information related to the Final EIR/EIS (about 100 supporting technical reports) in the Final EIR/EIS. Please also see standard response 10.1.1 in regards to the availability of the supporting technical documents. Please also see response to Comment O043-1 and O043-2. Please see Chapter 12 of the Final Program EIR/EIS for a complete list of references including supporting technical reports.

**O049-4**

Please see response to Comment O043-3.

**O049-5**

Please see response to Comment O043-3. The co-lead agencies believe that the HST Operations description is appropriate for a program level document. Should the HST proposal move forward, more detailed operational analysis will be required as part of future project-specific studies. Please also see standard response 2.7.2 and standard response 2.7.3.

**O049-6**

The co-lead agencies disagree with your assessment. Please see standard response 3.15.2 and standard response 3.15.13 regarding the general level of detail in this Program EIR/EIS and the anticipated more detailed project-level, Tier 2 studies. Please see response to Comment O042-1 for more information on the purpose of the Program EIR/EIS and the subsequent studies. The expected scale of stations and general footprint needs are described in the "Engineering Criteria" and "Alignment Configuration and Cross Sections" technical reports (January, 2004) and are reference in Section 2.7.3 of the Final Program EIR/EIS. The analysis on public utilities (like the analysis for the resource topics) was done at a program level of detail. Further analysis of local traffic impacts and connecting transit services will be performed in project-level environmental reviews when additional details of facilities and design and location will be known. A further evaluation of "project-related public service facilities" is beyond the scope of this program EIR/EIS process. Should the HST proposal move forward, more detailed project-level studies will be required.

**O049-7**

The engineering aspects of HST and the other alternatives are described at a conceptual level of detail (see Section 2.6 of the Final Program EIR/EIS). Describing "all engineering aspects of HST and the other alternatives" is beyond the scope of this program EIR/EIS process. The co-lead agencies believe that sufficient information has been provided in the Final EIR/EIS regarding to the advantages of the HST over the other alternatives (please see the Summary of the

Program EIR/EIS). A footnote has been added to the Final Program EIR/EIS documenting an appropriate source for the claim that HST would generate less runoff and has more infiltration potential than the Modal Alternative (See Section 3.15.3). Information from your comments (Attachment C) have been added to the Final Program EIR/EIS discussing the advantages of railway corridors over highways (from DeSanto and Smith 1993).

**O049-8**

The co-lead agencies believe that the Program EIR/EIS document fully meets the requirements of CEQA and NEPA for a program level document. The estimated costs for the HST Alternative and Modal Alternative are summarized in Section 4 of the Program EIR/EIS. Detailed cost-benefit analyses which were prepared as part of the Commission's and the Authority's feasibility studies were referenced in this program process (see Section 2.3). The preparation of a financing plan for the proposed HST system is not required for CEQA and NEPA compliance and is beyond the scope of this program EIR/EIS.

**O049-9**

Please see standard response 10.1.7. While the Commission discussed several phasing concepts, it made no preference or recommendation regarding the phasing of a statewide HST system. However, the Commission did determine that the links to Sacramento and San Diego were "vital to the feasibility of the project" (High-Speed Rail Summary Report and Action Plan, December 1996, page 8-28). Please also see standard response 2.13.1.

The co-lead agencies disagree with your conclusions. In the Draft Program EIR/EIS the co-lead agencies identified the HST Alternative as the preferred alternative based on a range of potential impacts derived from the various design options which were compared to the No Project and Modal alternatives. Based upon the information presented in the Draft Program EIR/EIS and comments received from agencies, organizations and the public the Authority identified a

preferred alignment and station locations which has been added to the Final Program EIR/EIS. The co-lead agencies believe that process that has been followed fully meets the requirements of CEQA and NEPA.

Please see standard response 6.3.1 in regards to the Bay Area to Central Valley portion of the HST Alternative.

#### **0049-10**

Please see response to Comment 0049-1 and response to Comment 0049-2.

#### **0049-11**

In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include specific mitigation strategies that would be applied in general for the HST system. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. At this level of design it is premature to develop more specific mitigation measures for specific potential effects. Only once there is a more detailed analysis of the alignment and avoidance and minimization efforts have been exhausted, will specific mitigation be addressed. Also see comment 0029-4 regarding the further examination of alignment options.

Because the proposed HST system would not be operational until the year 2020, the affected environment discussions describe both the existing conditions as of 2003 and, where appropriate and not overly speculative, the anticipated 2020 conditions that would pertain when the project becomes operational. For disciplines where projections of future changes in existing conditions would be overly speculative, the existing 2003 conditions were used as a proxy for the 2020 conditions. For some disciplines—such as transportation, energy, air quality, and land use—future conditions are routinely projected in adopted regional or local planning documents or are forecast by public agencies. In these cases, the existing conditions and the projected 2020 conditions were used as the basis for impact analysis. The technical studies prepared for each region and

addressing each resource area provided key information for the preparation of the affected environment discussions.

The environmental consequences discussions describe the potential environmental impacts (both adverse and beneficial) of the Modal and HST Alternatives in comparison to the No Project Alternative and compared to each other. Each discussion begins by comparing existing conditions with 2020 No Project conditions to describe the consequences of No Project and how environmental conditions are expected to change during the timeframe required to bring the proposed HST system online. As described above, existing (2003) conditions were used as a proxy for 2020 No Project conditions where 2020 baseline information was unavailable, could not be projected, or would be overly speculative. Using 2020 No Project conditions as a basis for comparison, the analysis of impacts then addresses direct and indirect impacts for the proposed HST and Modal Alternatives, as well as potential cumulative impacts.

#### **0049-12**

Program EIR/EIS the traffic analysis has been completed at a regional level of detail based on regional modeling data. Should the HST program move forward detailed intersection level traffic analysis will be required as part of subsequent project specific analysis. Should the HST proposal move forward, the Authority and the FRA will work closely with the local governments (cities) and other stakeholders involved to ensure that adequate access improvements are identified to minimize and mitigate potential traffic impacts. Detailed traffic studies are not appropriate until more specificity is defined for proposed stations in terms of location and design during the subsequent project level studies.

In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include mitigation strategies that would be applied in general for the HST system. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. Specific impacts and mitigations will be addressed during subsequent project level environmental review,

based on more precise information regarding location and design of the facilities proposed. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential impacts. Only after the alignment is refined and the facilities are fully defined through project level analysis, and avoidance and minimization efforts have been exhausted, will specific impacts and mitigation measures be addressed.

Please see comment O049-11, above, regarding the comparison of existing and future conditions.

#### **O049-13**

The detailed information necessary to conduct a quantitative construction phase analysis is not available at this stage of the project. Information such as the years of construction operations at each analysis site, the types of equipment and hours of equipment operating at each site, the location of this equipment relative to nearby sensitive land uses, the number of trucks entering, leaving, and idling near site, the mitigation measures that may be required or proposed for this project, etc. has not been specified with enough detail to conduct a quantitative analysis.

Section 3.18 of the Final Program EIR/EIS addresses construction methods and the potential for construction impacts in general. In addition, each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. However, construction impacts are highly site-specific in nature. Construction impacts will be addressed in detail during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed and the phasing or sequencing of construction. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential impacts.

Section 3.3 of the Final Program EIR/EIS primarily addresses the potential impacts to air quality at a regional level. However, Section 3.3.1.D describes the methodology applied to assess localized impacts at this program level of analysis. Section 3.3.3 generally addresses impacts in each region of study. More detailed traffic analysis (see Response O049-12 above) completed at the project level of analysis will be necessary to support potential localized air quality impacts.

In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include mitigation strategies that would be applied in general for the HST system. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. Specific impacts and mitigations will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed.

#### **O049-14**

The co-lead agencies disagree with your assessment. The Program EIR/EIS calculates both direct (Section 3.8) and indirect impacts to farmlands (Section 5). Severance impacts are discussed qualitatively in Section 3.8 but cannot be quantified at a program level of detail. Should the HST proposal move forward, more detailed project specific study will be required. Please see responses to Comment Letter O047 from the "American Farmland Trust". Please see response to Comment O064-08 in regards to suitable mitigation measures and additional information in Section 3.8.6 of the Final Program EIR/EIS.

#### **O049-15**

Section 3 of the PEIR/S programmatically evaluates the potential for direct and indirect impacts from the No Project, HST and Modal Alternative. Please see standard response 3.15.2 and standard response 3.15.13 regarding the level of analysis and the intended uses of the PEIR/s. Please also see responses to Comments O034

from the Defenders of Wildlife. Please see responses to Comments AS004 – 45 regarding the addition of a construction section and response to Comment AS004 – 46 regarding the addition of a discussion of HST support facilities to the PEIR/S. Please see standard response 3.15.7 and response to Comment O034 – 15 regarding the widths of the evaluation corridors – the evaluation “envelopes.” Please see standard response 3.15.10 regarding consideration of habitat conservation plans, natural community conservation plans (NCCP), and other approved local, regional, or state habitat conservation plans. Please see responses to Comments AF007 – 5, and AL072 – 8 and standard responses 3.15.7, and 3.15.11 regarding impacts to wetlands. Please see standard responses 3.15.2, 3.15.3, 3.15.4, 3.15.9, and 3.15.11 and response to Comments AS004 – 46, 47, 48, 49, & 51, AS012 – 7, 8, 9, 12, and 17, and O034 – 3 & 4 regarding impacts to wildlife and wildlife corridors and habitat fragmentation. Please see response to Comment AS004 – 50 regarding privately owned conservation lands. Please see response to Comment AS004 – 49 regarding EMF/EMI levels associated with the HST Alternative. Please see response AF009 – 26 regarding threatened vs. endangered species. Please see response to Comments AL072 regarding impacts to the Grassland Ecological Areas. Please see standard response 3.15.7 regarding the future evaluation that will be undertaken for the Corridor from the Central Valley to the Bay Area, including a review of Altamont Pass. Please note that the Authority has dropped the previously proposed Los Banos HST Station from further consideration. See also additional discussions of potential mitigation strategies in Chapter 3 of the Final Program EIR/EIS.

**O049-16**

Please see responses to Comments AL063 – 1 and 14 regarding consistency with local and regional plans. The HST Alternative description has been expanded – please see Section 2.6 of the Final PEIR/S. Please see response to O044 – 18 regarding environmental justice. Please see response to Comment O015 – 4 regarding the land use impact evaluation envelope. Please note that the Authority has dropped future consideration of the HST alignments through and

under Henry Coe State Park and the Orestimaba State Wilderness. Please see standard response 6.3.1. Please see standard response 3.15.2 and standard response 3.15.13 regarding the level of analysis and the intended uses of the PEIR/s.

Please see standard response 5.2.1 in regards to potential growth inducement. Analysis for “Land Use Planning, Communities and Neighborhoods, Property, and Environmental Justice” is summarized in Section 3.7 of the Program EIR/EIS. Section 3.7.3 “Environmental Consequences” describes the potential impacts of the HST and Modal Alternatives. Section 3.7.4 “Comparison of Alternatives by Region” provides more detailed comparisons for each region of potential land use impacts. Section 3.7.5 presents mitigation strategies for potential land use impacts. The findings of Section 3.7 are summarized in Chapter 7. The use of design practices and commitments to mitigation strategies as part of the decision on the Final Program EIR/EIS are expected to substantially mitigate most potential adverse impacts of the proposed HST system. However, demonstrating specific significant land use impacts and how mitigation measures would be applied to reduce these to less than significant is beyond the scope of this program EIR/EIS process and must be included in project-level analyses when more detailed information on specific alignment locations and design options will be available. Should the HST proposal move forward, more detailed project specific studies will be required.

**O049-17**

Please see standard response 5.2.1 and 5.2.5.

**O049-18**

Please see standard response 3.15.13. The Co-lead agencies acknowledge the importance of detailed comments regarding hydrology and water resources that are embodied in this comment. These issues will be addressed in the subsequent studies and project-level, Tier 2 studies for the selected HST alignment and station options. The Co-lead agencies believe that the level of analysis presented in the PEIR/S is sufficient to support a decision

regarding whether to advance the statewide high speed train network and to eliminate some alignment options from further consideration and identify preferred corridor alignment options. The Co-lead agencies acknowledge that information on the subjects described in this comment must be addressed in the analyses of alignment and station options that will be prepared in subsequent studies and the project-level, Tier 2 evaluations. The Co-lead agencies recognize the importance of the issues raised in this comment (and many others) requesting more detailed analysis, but believe that using the two step analysis process (outlined in standard response 3.15.13) is a reasonable, appropriate, and practical way to evaluate such a large and extensive project as a statewide high speed train network. Therefore, the Co-lead agencies acknowledge that the conceptual nature of the Alternatives makes it impossible to fully evaluate the potential for impacts on hydrology and water resources, but are satisfied that the PEIR/S provides enough information to make a decision about whether to advance the HST alternative and identification of preferred alignment and station options. While detailed environmental setting information will be necessary as part of the project-level environmental analysis, the Co-lead agencies are confident that the PEIR/S provides enough information to confirm that, all other things being equal, the proposed HST alignment would have fewer impacts on hydrology and water resources than the Modal Alternative consisting of highway and airport expansions. Mitigation measures can only be appropriately defined as part of the more detailed project-level design and environmental process.

**O049-19**

Please see response to Comment O064-07. Please also see response to Comment O064-08 in regards to suitable mitigation measures. Please also see Section 3.18 for a discussion of potential construction related impacts and Chapter 3 for “design practices” commitments.

**O049-20**

The public utilities impact analysis is programmatic and addresses only representative utilities; it does not address all utilities and does not address local details. Project-level analysis would address all utilities and local issues once the alignments and profiles, and facility designs are more defined. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential impacts. Should the HST proposal move forward, the Authority and the FRA will work closely with the local governments (cities) and others to avoid, minimize, and mitigate, where necessary, taking all necessary steps to ensure that there will be no disruption to service through thoughtful design and best construction practices.

Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. Specific impacts and mitigations will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed.

Greater specificity in alignment location and profile, station designs, system access, operating plans, and control systems is also required to address the potential impacts on specific public services. These issues will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed (e.g., elevated, at-grade, access locations, station design features, fencing type and location, etc.). The detail of engineering associated with the project level environmental analysis will allow the Authority to identify system requirements and further investigate ways to avoid, minimize and mitigate potential affects.

**O049-21**

Section 3.16: Section 4(f) and 6(f) Resources has been renamed in the Final Program EIR/EIS to “Section 4(f) and 6(f) Resources (Public Parks and Recreation, Waterfowl Refuges and Historic Sites).”

It is important to note that all of the impacts associated with the HST and Modal Alternatives are potential impacts. The Authority screened a large number of different alignment options and alignment combinations throughout the state to develop the HST Alternative analyzed in the Final Program EIR/EIS. A key objective for the HST system is to avoid and/or minimize the potential impacts to cultural, park, recreational and wildlife refuges. This objective, along with others, was used to eliminate several alignment options that would have potentially affected 4(f) and 6(f) resources.

If a 4(f) or 6(f) resource is ranked as "high" that indicates that the HST or Modal centerline is within 150 feet of a 4(f) or 6(f) resource. However, given the conceptual level of engineering performed for this programmatic environmental document it is premature and would be speculative to estimate specific physical impacts based upon the location alignment options and their relationship to 4(f) and 6(f) resources in the program-level analyses. The more detailed engineering associated with the project level environmental analysis will include further investigation of ways to avoid, minimize and mitigate potential use of 4(f) and 6(f) resources, findings regarding impacts to 4(f) and 6(f) resources would be made during project-level studies when impacts from more specific alignment locations would be assessed.

A table identifying each potentially affected resource and the nature of potential impact in terms of its relative proximity to the proposed facilities for both the Modal and HST Alternatives is provided in the Final Program EIR/EIS (Appendix 3.16-A).

Please see response to Comment AS004-1 and response to Comment O051-1.

In the Final Program EIR/EIS, each environmental section of Chapter 3 has been modified to include more specific mitigation strategies that would be applied in general for the HST system and "design practices" commitments. Each section of Chapter 3 also outlines specific design features that will be applied to project level studies and the implementation of the HST system to avoid, minimize, and mitigate potential impacts. Once alignments are refined through

project-level analysis and after avoidance and minimization efforts have been exhausted, specific mitigation will be addressed.

#### **O049-22**

Please see standard response 3.17.1.

#### **O049-23**

Please see response to Comment O064-08 in regards to suitable mitigation measures. Please see Section 5, "Economic Growth and Related Impacts" in regards to potential growth inducement as a result of the HST and Modal alternatives. Please also see information added to the Final Program EIR/EIS in Chapter 3 on mitigation strategies and design practices, and Chapter 6B in regards to transit-oriented development measures.

The total cost of environmental mitigation was estimated to be 3% of the line construction costs (i.e., track, earthwork, structures, etc.) for each segment, based on other recently implemented transportation corridors in California. This cost is intended to represent the total cost associated with potential mitigation of environmental impacts such as impacts to wetlands, parkland, biological resources, and wildlife habitat. Noise mitigation with sound walls and right-of-way impact and relocation mitigation are estimated separately and thus not included in the 3% estimate. This factor is based on the average to estimate a total cost of mitigation across a system. While it does not account for potential differences between alignment options or variations along segments, it provides an overall estimate of mitigation costs consistent with other projects of this magnitude.

#### **O049-24**

The co-lead agencies believe the Final Program EIR/EIS document meets the requirements of CEQA and NEPA. Please see standard response 6.3.1. Please also see Chapter 2 of the Final Program EIR/EIS for a discussion of the process for identifying the alternatives to be addressed. The USACE and the USEPA have concurred in the identification of alternatives for analyses and all the

cooperating agencies concurred with Chapter 1, the purpose and need statement for the Final Program EIR/EIS.

**O049-25**

Please see standard response 2.18.1 and response to Comment O049-24.

**O049-26**

Please see standard response 2.18.1. Please also see response to Comment O067-23.

**O049-27**

Please see response to Comment O049-24, the Co-lead agencies respectfully disagree with your assessment of the Program EIR/EIS and the need for recirculation. Individuals, organizations, agencies and others that have submitted comments on the Draft Program EIR/EIS as legible addresses will receive an electronic copy of the Final Program EIR/EIS. Eddy Moore and Terrell Watt will be included on the Authority's mailing list.

**Attachment A & B**

Please see standard response 2.18.1 in regards to the Altamont Pass. Please see response to Comment O067-21 in regards to the ridership analysis done in support of the Authority's June 2000 Business Plan. Please see response to Comment O049-9 in regards to the phasing of the HST Alternative.

The co-lead agencies determined that the ridership and revenue forecasts done for the June 2000 Business Plan were appropriate for use in the Program EIR/EIS process. Please see standard response 2.1.1 and standard response 2.1.2 in regards to the ridership forecasts. Additional forecasts for design options that were not part of the Business Plan analysis were done by Charles River Associates using the same models used for the Business Plan (such as for the "Diablo Direct" route options) and the results summarized in the

Program EIR/EIS. Detailed results of the "Diablo Direct" forecasts were provided by the Authority on request. The co-lead agencies agree that Sacramento to the Bay Area is an important intercity travel market and this market is included as part of the HST Alternative. The catchment areas listed were for the purposes as outlined for the screening evaluation. These calculations were not used to develop ridership and revenue forecasts. The ordering of the objectives listed in Table 2.6-5 were not intended to represent an hierarchy of importance for the objectives as your comment implies (while maximizing ridership is listed first in this table, it was listed as on page 2-42 of the Draft EIR/EIS). For the multitude of options analyzed in screening, at a program level of detail it was not practical to do detailed ridership and revenue forecasts for every potential HST design option considered. The co-lead agencies determined to quantify travel time and population and employment within a reasonable catchment area in order to indicate the potential ridership and attractiveness of alignment and station options. Please see the "Alignment/Station Screening Methodology" (Authority/FRA, May 16, 2001) technical report for more details.

Please see information in the Final Program EIR/EIS regarding mitigation strategies and design practices (Chapter 3), construction methods (Section 3.18), and transit-oriented development measures (Chapter 6B).

**Attachment C**

Please see response to Comment O049-15.

**Attachment D**

Please see response to Comment O049-19.

**Attachment E**

Acknowledged.

**Attachment F**

Acknowledged.

Comment Letter O050

FROM : www.bayrailalliance.org

FRAX NO. : 408-732-8712

Aug. 31 2004 04:16PM P1

FROM : www.bayrailalliance.org

FRAX NO. : 408-732-8712

Aug. 31 2004 04:16PM P2

O050



August 31, 2004

Attn: California High-Speed Train  
Draft Program EIR/EIS Comments  
925 L Street, Suite 1425  
Sacramento, CA 95814

Re: Comments on the DEIR/DEIS for California HSR

Dear High Speed Rail EIR/EIS Staff:

BayRail Alliance wishes to submit the following comments on the draft EIR/EIS for California High Speed Rail. These are in addition to comments that we have made orally at public hearings on the EIR/EIS.

We would very much like to see HSR built. Two years ago we organized a community forum on California HSR with the help of the HSRRA, the Mineta Transportation Institute and a number of industry partners. We believe that HSR is necessary for California's transportation future, and that it would provide great environmental and economic benefits for our state.

Now, two years have passed, and we are greatly disappointed to see what was presented in the DEIS/EIR. We believe that the draft needs substantial work and revision to provide information that is needed for the project to proceed. As it stands, the document is problematic and will not withstand any legal challenge. It lacks the support of a number of groups who support the concept of HSR, such as the Sierra Club, the Planning and Conservation League, the Train Riders Association of California, the Committee for Green Foothills and many other environmental groups.

While there are a great many words in this document, perhaps the most appropriate adjective for it is "vague". In particular, we were disappointed at the light treatment that the Altamont Pass alternative received in the draft document. The explanations given for its alleged inferiority as compared to say, the Pacheco routing, are unconvincing even for those who are not strongly in favor of the Altamont routing, and almost no data is given to back up its assertions.

Furthermore, the operating characteristics of the Altamont alternative are mischaracterized in this draft document, and then attacked as inferior. We'd like to see the operating characteristics properly described and analyzed. For example, the Altamont proposal, as long advocated for by its proponents, doesn't call for a "three-way split", but for trains to go in a two-way split to San Francisco and San Jose. Travelers to Oakland would transfer to BART to reach Oakland under this scenario. So the modeling data given in Table 2.6-4 is misleading and meaningless.

Additionally, we believe that most travelers would be traveling to San Francisco, not to San Francisco and San Jose equally. But no origin-destination projections are given for any city pairs in this draft document. This information needs to be provided. By artificially imposing the same number of trains to go to San Francisco and San Jose instead of basing the split on projected demand, the modeling results are seemingly rigged to produce a less favorable outcome for the Altamont routing. We ask that you work with long-time HSR proponents like Michael Kiesling of Architecture 21 and TRAC to describe the Altamont Alternative more accurately.

We understand that the Altamont routing was actually the preferred alternative in an earlier HSR study, so the strenuous objection to studying it in the DEIR seems odd, especially when you acknowledge in your draft report that it may be significantly cheaper and faster than other alternatives.

We are further disturbed at the unequal treatment and level of scrutiny the routes received in the "Reason for Elimination" Table 2.6-3. For example, the Altamont route is given a poor rating for environment, yet the Pacheco pass route would impact many more acres of wetlands and important birding areas. We understand that the Audubon Society is open to the notion of rebuilding the Dumbarton Rail bridge and for HSR to provide mitigations for that along the Bay, and would prefer that to significant impacts to the wetlands along the Pacheco route. Also, we have heard that very few tall ships would need to pass the Dumbarton rail bridge, only on the order of once or twice a year and always with plenty of notice. Perhaps a lower rail bridge that is designed to open for ships twice a year would be a cost-effective alternative. In any case, the magnitude of the environmental impacts of the Altamont routing on San Francisco Bay wetlands are not discussed in much detail in your draft document to justify the elimination of this route in favor of the Pacheco route.

The poor ratings given to Altamont for Revenue/Ridership and Connectivity/Accessibility seem equally implausible, because the Altamont corridor is much more heavily populated and congested at present as compared to the Pacheco corridor. We think it is likely that the Altamont routing would provide greater revenues to HSR initially. Again, we ask that projected origin-destination data be presented in the draft DEIR/DEIS. No information is presented in the draft DEIR/DEIS to indicate what ridership from San Francisco and San Jose would be lost if the Pacheco route, rather than the Altamont route, is selected. We ask that the Altamont alternative be analyzed fairly with full data given for expected ridership and travel times between city pairs.

Our organization has a significant presence in the south bay. We do feel that San Jose riders would have a better, more appealing travel experience with San Jose becoming a terminus as compared to being a "pass-through" city for HSR. Instead of having to leap onto trains that are perhaps already 2/3 full with travelers from San Francisco, San Jose riders could enjoy having empty trains waiting for them at the station, to be filled mostly with riders from San Jose.

O050-1  
cont.

O050-1



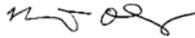
**Comment Letter O050 Continued**

FROM : www.bayrailalliance.org      FAX NO. : 408-732-8712      Aug. 31 2004 04:16PM P3

We note that a number of cities along the Peninsula have concerns about the impacts of HSR on their cities which can be reduced through an Altamont, rather than a Pacheco routing. Finally, there are issues with train capacity at San Jose and San Francisco stations that are not considered. San Francisco will not have the physical capacity to be the terminus for all HSR trains, nor do we believe that it is necessary for it be so.

Please revise and recirculate the DEIR so that it fully considers the Altamont Pass Alternative. By fighting a fair assessment of the Altamont routing, the Authority has lost many friends of the project and decreased the chances of HSR ever winning a bond measure or being built. We hope that the HSR/EIR team will listen to these community voices and rectify this situation so that the project will have a chance to succeed.

Sincerely,



Margaret Okuzumi  
Executive Director

O050-1  
cont.

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**Response to Comments of Margaret Okuzumi, Executive Director, Bay Rail Alliance, August 31, 2004 (Letter O050)**

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**O050-1**

Please see standard response 2.18.1.

Comment Letter O051

O051



CALIFORNIA STATE PARKS FOUNDATION

The Voice for California's State Parks

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Medhi Morshed, Executive Director
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento California 95814

August 30, 2004

Allan Rutter, Administrator
Federal Railroad Administration
U.S. Department of Transportation
1120 Vermont Avenue N.W. M/S 20
Washington, D.C. 20590

Re: Comments on Draft Program Environmental Impact Report/Environmental Impact Statement on Proposed California High Speed Rail Line

Dear Messrs. Morshed and Rutter:

We welcome the opportunity to comment on the Draft Environmental Impact Statement/Supplemental Environmental Impact Report for the California High Speed Rail Line Project.

The California State Parks Foundation is the only statewide organization dedicated to the protection of the California State Park system. The Foundation was founded 35 years ago by William Penn Mott, Jr., former director of California and National Park Systems. Since that time we have raised over \$116 million to support park projects and have 50,000 members statewide. We reviewed the Draft Environmental Impact Report (DEIR)/Environmental Impact Statement (DEIS) from the standpoint of potential impacts to our magnificent State Park System.

As California has led the nation in its commitment to environmental protection, it is fitting that the state also would set a new standard in the development of alternative modes of transportation. This project has the potential to provide a state-of-the-art high speed rail line that could provide competitive transportation alternatives for Californians seeking travel between northern and southern California. It may also connect Central Valley communities with major metropolitan areas in other parts of the state. Given the magnitude and expense of the proposed transportation project, we believe the general public has a right to expect a comprehensive and high quality analysis of the potential impacts required under state and national regulations. We have found the DEIR/S to be insufficient, and 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") and the National Environmental Policy Act ("NEPA") 42 U.S.C 4321; 40 C.F.R. 1500.1.

Accordingly we believe the DEIR/S must be revised and re-circulated.

State Parks Foundation Comments 1

HEADQUARTERS 800 College Ave., P.O. Box 548, Kentfield, CA 94914 TEL 415-258-9975 FAX 415-258-9930
SOUTHERN CALIFORNIA OFFICE 3250 Wilshire Blvd., Suite 2003, Los Angeles, CA 90010 TEL 213-380-9980 FAX 213-380-9987
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INTRODUCTION

The California Department of Parks and Recreation (DPR) is responsible for managing the most diverse and complex natural landscapes of any land-management agency in California. More rare and endangered species exist on State Park lands than any other category of state owned property. Our State Parks are living classrooms educating visitors to the state's unique natural landscapes and great cultural resources, including wilderness areas, recreation areas, reservoirs, museums, historical and archeological sites. California's State Parks contain the most diverse natural holdings of any state in the nation, including one-quarter of the spectacular California coastline, old growth redwoods, oak woodlands, pristine deserts -- 1.5 million acres overall. In addition to resource protection, State Parks provide affordable recreation to more than 90 million visitors each year. State Parks provide a much needed refuge for urban residents, and afford all visitors safe and economical recreation. Data shows that visitors to State Parks spend upwards of \$2.6 billion each year in local communities. That revenue is cycled through the economy and results in total output of nearly \$7 billion. More than 100,000 jobs statewide are dependent on park visitors and their spending. Open space preserved in parks is a benchmark of a community's quality of life, and our parks give local communities and the state a competitive edge in attracting new businesses.

The public reasonably expects our State Parks to be treasured and protected in perpetuity. Since the creation of our first State Park, Yosemite, in 1864 by Abraham Lincoln, Californians have demonstrated their commitment to the preservation of these public resources. Historic parks, beaches, old growth forests, deserts, ghost towns and mining towns are a small sampling of the incredible state assets protected in these parklands. Today the System is comprised of 278 Park Units. By our best reckoning upwards of 40 State Parks could be directly or indirectly impacted by the proposed High Speed Train (HST). (Appendix 1.)

Program DEIR/S Does Not Contain Adequate Analysis

CEQA and NEPA both require that an environmental review accompany projects for major federal or state actions that may significantly affect the environment. The environmental review should consider items such as significant direct, indirect, cumulative and short and long-term environmental impacts. In effect the DEIR/S is to serve as an "environmental alarm bell" whose purpose is to alert the public and responsible officials to environmental changes before they have reached ecological points of no return." County of Inyo v. Yorty (1973) 32 Cal.App3d 795,810.

The DEIR/S is not sufficient in that it does not include adequate information to properly educate decision-makers and the public of the breadth of the potential impact to our cherished state parklands by a HST that does not adequately consider the impacts to the biological, recreational, and historic resources. Reviewing the Alternative HST and proposed routes, we believe upwards of 40 and perhaps many more State Parks are either directly or indirectly impacted. In the DEIR/S, when impacts to parklands are considered they are evaluated only from the standpoint of reduction of open space without considering

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U.S. Department of Transportation
Federal Railroad Administration

**Comment Letter 0051 Continued**

the potential degradation of natural resources, cultural resources, and recreation opportunities.

The DEIR/S fails to adequately describe the scope of the HST project and mitigate its host of associated impacts with specific, enforceable mitigation measures. The document repeatedly defers critical analysis and project description on the grounds that the DEIR/S is a program EIR/S. An agency "must use its best efforts to find out and disclose all that it reasonably can." CEQA Guidelines § 15144. The DEIR/S vague analysis with respect to numerous project elements precludes a full and proper analysis of project alternative impacts.

The DEIR/S repeatedly determines that project impacts would not be significant based solely on *uncommitted future assumptions*. CEQA contemplates 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. The proposed project is much more than a modal choice. The DEIR/S provides insufficient details concerning many elements of the proposed project. The DEIR/S deferral of description and analysis is particularly egregious because project approvals may *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).

The DEIR/S 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 necessary analysis of 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. Further, CEQA generally requires that all mitigation measures be adopted simultaneously with, or prior to, project approval. An agency may defer preparation of a plan for mitigation only when the agency commits itself and/or the project proponent to satisfying specified performance standards that will ensure the avoidance of any significant effects. *Id.* In the present case, the DEIR/S violates CEQA by deferring critical analyses of project impacts and feasible mitigation.

**The DEIR/S Fails to Adequately Describe Features of the Project Alternatives**

According to the DEIR/S, the California High Speed Rail Authority (Authority) and Federal Railroad Administration (FRA) may not only select a modal choice but as well may select a preferred HST corridor/alignment, station locations, and recommended mitigation strategies based on the DEIR/S. DEIR/S page S-1. The lack of an adequate and complete project description does not support informed decision-making concerning modal choice let alone more detailed decisions such as corridor/alignment and station locations. Specifically, the DEIR/S provides only the most cursory information concerning the description of the modal alternatives and even less concerning the specifics of the

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corridor/alignment and station locations. Information that is provided is difficult to verify because the assumptions underlying the information is not provided or is located in documents not readily available or adequately summarized in the DEIR/S.

**The DEIR/S Fails to Adequately Analyze and Mitigate the Project's Significant Impacts**

The DEIR/S analysis of environmental impacts fails to provide the necessary facts and analysis to allow the Authority, the agencies and the public to make an informed decision concerning the project alternatives (modal and HST related) and mitigation measures. Nor does the document adequately consider recreational impacts. 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.4th 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 DEIR/S fail to provide supporting evidence for its conclusions concerning the significance of project-related and cumulative impacts, it is often not possible to tell from the DEIR/S whether an impact is considered significant, less than significant or reduced to less than significant after mitigation.

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. This document fails however to identify feasible mitigation measures capable of mitigating the significant environmental impacts of the project alternatives and cumulative impacts.

Finally, the DEIR/S improperly bases its analysis of the impacts associated with the modal and HST alternatives with the no project alternative, rather than with existing baseline conditions. This approach is improper under both CEQA and NEPA, 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 DEIR/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.

**The DEIR/S Fails to Analyze Adequately Biological Resource Issues**

Once the presence of biological resources in a project site have been identified and described, a DEIR/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

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O051-2  
cont.

O051-3

O051-4



Comment Letter O051 Continued

long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to the ecological systems, and . . .

The DEIR/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. In the case of State Parks, which are managed by DPR to ensure adequate protection of complete ecosystems the Department is charged with protecting the quality of habitat. The DEIR/S however omits consideration of habitat and instead focuses on species or communities. The cumulative and substantial impacts by HST to State Parks must be addressed. For example in section 3, pages 15-18, the analysis does not consider the quality of the habitats impacted nor the overall impact of building HST through public parks, wilderness areas or protected conservation areas. The impacts are much more significant than expanding an existing transportation corridor. Overall there is a lack of depth in the analysis, and the method of determining “high” or “low” impacts was skewed based on the lack of information collected. With greater research, a “low” score may in fact be an area of “high” impacts.

Construction impacts such as duration, disturbance, pollution and longer-term impacts like fragmentation of habitat, disruption of wildlife corridors, noise, vibration, ground and surface water changes on biological resources are not considered. What is particularly disheartening is that the DEIR/S appears to focus on human impacts and mitigation. The noise impacts on wildlife in particular are barely considered. One can assume that at higher speeds the HST noise level will be greater than conventional trains, and in fact the contrast of noise levels will be the greatest in those areas least developed, like wilderness areas in State Parks or agricultural or conservation lands. The effects of noise impacts to not only the environment but in particularly wildlife are not considered at all. Examples of omitted or inadequate project description elements that result in an underestimation of biological impacts include but are not limited to fencing/noise walls, grading, location and extent of staging areas, location and extent of borrow and spoils sites, extent of borings, location and extent of construction roads, and traffic.

The description of the affected environment does not provide an adequate description of the status of habitats and species that may be affected by the project or the regional context and interrelationships of the resources within and between project regions. As an example of inadequate consideration of impacts on page 3.9-11, the report determines that “landscape typologies considered scenic and therefore most subject to high contrast visual changes where the HST would begin to dominate the landscape and detract from the existing features – are the natural open space and park typology and the traditional small urban community typology.” In the following paragraph the solution offered is, “At this program level of analysis, there are no potentially high aesthetic or visual impacts that could not be reduced or mitigated through design treatments (e.g. architectural treatments at historic stations, tunneling, or minimizing the cut and fill through mountainous terrain and in natural areas.” This a solution perhaps successful in a suburban or urban location but would be totally inappropriate in many State Parks or open areas.

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O051-4 cont.

The DEIR/S is not consistent in its description of protected areas and other biologically important but unprotected land. Several important open space areas (e.g., The Don Edwards San Francisco Bay National Wildlife Refuge, Nature Conservancy’s Mount Hamilton Project, South Bay Salt Pond Restoration Project, Henry Coe State Park) are mentioned in the Bay Area to Merced region but the DEIR/S does not mention the numerous other federal, state, local, and privately owned biological open space areas that occur within this and other regions of the project.

In addition, the biological resources and wetlands section provides only a narrative of lists of species that may be potentially affected by the project. There is no differentiation between rare, threatened, or endangered species, or a meaningful discussion of the individual species that would allow an assessment of the potential for the project to adversely affect the species via direct, indirect, or cumulative impacts. The description of wildlife movement/migration corridors provides no information on what areas the corridors are connecting and which species may be using them. The DEIR/S states that it used the Missing Linkages report (California Wilderness Coalition 2000) to assess potential impacts to wildlife corridors but does not discuss potential impacts to the individual corridors described in the report.

In addition, the DEIR/S does not discuss several Natural Community Conservation Planning (NCCP) efforts with preserve areas that may be affected by the project. For example, the Orange County Central Coastal NCCP and the Western Riverside NCCP (both approved), through which project alignments traverse, are not discussed at all in the DEIR/S. The San Diego Multiple Species Conservation Program (MSCP) and North San Diego County MHCP (incorrectly referred to as the “MSHCP”) are discussed under the Los Angeles to San Diego via Inland Empire region, but the DEIR/S states that there are “no conservation plans identified” within the Los Angeles to San Diego via Orange County region. This region contains three approved NCCPs and one in preparation (Southern Orange County NCCP). In the absence of adequate, accurate and complete setting information, analyses of project-related and cumulative impacts cannot be completed.

The DEIR/S does not address the feasibility of mitigating many of the potentially significant impacts identified, many of which appear to be unmitigable (e.g., tens of thousands of acres of sensitive species habitat in the Bay Area to Merced region, dozens of vernal pools in the Los Angeles to San Diego via Inland Empire region). Mitigation “strategies” proposed for biological resource impacts are vague and deferred. For example, the DEIR/S states:

“Potential strategies to mitigate impacts on biological resources would include field verification of sensitive resources and filling data gaps to allow designs to avoid impacts on special-status species and sensitive habitat areas...For example, to avoid or minimize impacts in sensitive areas, alignment plans and profiles could be adjusted or proposed structures could be constructed above grade or in tunnels...Special mitigation needs would be considered in the future with the appropriate authorities that are responsible...” DEIR/S page 3.15-31.

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O051-4 cont.



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This 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. Some mitigation (e.g. additional tunneling or above grade construction) may prove to be infeasible.

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

- Consistency with local natural resources related planning elements and policies for each jurisdiction the alignment traverses;
- Conflicts with NCCP or Habitat Conservation Plans;
- Conflicts with State Parks, 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;
- Assessment of any growth inducing impacts to natural resources (see Planning/Land Use Study Terms below).

The DEIR/S contains a lengthy list of subsequent analyses that would be required to "obtain more reliable assessments of potential impacts on biological resources in the study area." DEIR/S page 3.15-31. The technology exists to complete these analyses before selection of HST and specific alignments and station locations. 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 DEIR/S.

The DEIR/S Fails to Adequately Analyze Land Use Impacts

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, or HST alignment and station alternatives. The study area for land use is limited to 0.25 miles on either side of the centerline of the rail and highway corridors included in the alternatives, and the same distance around stations, airports and other HST facilities. For the property impacts analysis, the study area is only 100 feet. The areas must be expanded to address the true effects of a train going by at 200 miles per hour. Revised analyses of project-related and cumulative land use impacts must be completed based on a complete description of the project and project setting.

The DEIR/S fails to point out a number of project inconsistencies with applicable policies and regulations. For example, two of the proposed Bay Area Alignment Options go through Henry Coe State Park and its Orestimba Wilderness. The DEIR/S fails to discuss

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the applicability of the California Wilderness Act of 1974 (Public Resources Code 5093.30 through 5093.40) and the legal implications of creating a railroad right-of-way through the Orestimba Wilderness. The California Wilderness Act specifically prevents the construction of new roads or motorized transport through Wilderness Areas. Thus a new HST right-of-way would clearly be in violation of the spirit and the letter of the California Wilderness Act. Declassifying large areas of the Orestimba Wilderness as official State Wilderness areas would severely undermine the California Wilderness Act and the protection of thousands of acres of land that are supposedly protected by it. Nor does the DEIR/S address the circulation impacts to existing State Parks. For instance if a station is placed in one location vs another, it might drive additional traffic to a park, or away from it. This will have an effect on staffing and maintenance demands as well as biological and scenic resources. Also depending on the relationship of stations to road other infrastructure, use patterns of areas of parks might be impacted. For example, if the main entrance of a park is served by a road that is not well connected to a station and traffic is driven to a secondary, entrance, it could substantially change use patterns for better or worse.

The DEIR/S Fails to Analyze Adequately Section 4(f) and 6(f) Issues

Interpretation of federal agencies duties under the 4(f) of the Department of Transportation Act of 1966 was first 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 which the Court overturned the Secretary of Transportation's approval of a six-lane highway through a park in Memphis, Tennessee. In that case Justice Marshall stated that the "very existence" of section 4(f) demonstrates "that protection of parkland was to be given paramount importance." The Court made clear that choosing an 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 rigorous mandate of the provision.

The need to rigorously meet the mandate of section 4(f) is especially urgent in this case. California's State Parks protect a rich variety of habitats, species and landscapes and provide unlimited recreational opportunities for millions of visitors each year. Henry Coe State Park, Colonel Allensworth State Historic Park, Old Sacramento State Historic Park, Fort Tejon State Historic Park, Hungry Valley State Vehicular Recreation Area, Castaic Lake State Recreation Area, Taylor Yard, Corn Fields, Doheny State Beach, San Clemente State Beach, Candlestick Point State Recreation Area, Eastshore State Park, San Bruno Mountain State Park, South Carlsbad State Beach, Torrey Pines State Beach and State Reserve are a sampling of the 40 or more State Parks either in the direct path or in close proximity (less than 3,000 feet) to various proposed routes of the HST.

As the Supreme Court held in *Overton Park*, "only the most unusual situations are exempted" from the 4(f) mandate. These situations include "truly unusual factors" demonstrating that alternatives to the proposed action present "unique problems" or require costs or community disruption of "extraordinary magnitudes." 401 U.S. at 411, 413. The 9th Circuit has subsequently interpreted this exception quite narrowly, holding that an alternative that required dislocation of several residences and businesses and cost millions

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of additional dollars did not justify an exception to section 4(f). Stop H-3 Ass'n v. Dole, 740 F.3d 1442, 1451-52 (9th Cir. 1984). Minimizing the impacts on Section 4(f) and 6(f) resources should be a major priority for evaluating all possible routes of the California High Speed Rail and should be used consistently.

Complementing Section 4(f), "Section 6(f) of the act prohibits the conversion to a non-recreation purpose of property acquired or developed with" grants obtained through the Land and Water Conservation Fund Act "without the approval of the U.S. Department of the Interior's (DOI's) National Park Service. Section 6(f) directs DOI to ensure that replacement lands of equal value (monetary), location, and usefulness are provided as conditions to such conversions. Consequently, where such conversions of Section 6(f) lands are proposed for transportation projects, replacement lands must be provided." The HST Alternative discussion for the segment from Los Angeles to San Diego via Orange County states "Tunneling options in several sections of the corridor could reduce or avoid impacts on some of the Section 4(f) and 6(f) resources. In fact, because tunneling could result in removing of existing above-ground track, new parklands could be potentially created for public use, which would result in beneficial impacts on Section 4(f) and 6(f) properties." This limited discussion of replacement land is inconsistent with Section 6(f). (EIR/S at 3.16-1,2).

**The DEIS/R Fails to Discuss High Speed Rail Authority's Obligations Under the Public Park Preservation Act.**

The DEIR/S does not address the Public Park Preservation Act of 1971, Pub. Res. Code § 5400 *et seq.* The Public Park Preservation Act, which applies to any park operated by a public agency in California, provides in part:

No city, city and county, county, public district, or agency of the state, including any division, department or agency of the state government, or public utility, shall acquire (by purchase, exchange, condemnation, or otherwise) any real property, which property is in use as a public park at the time of such acquisition, for the purpose of utilizing such property for any nonpark purpose, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both, as required by the provisions of this chapter to enable the operating entity to replace the park land and the facilities thereon.

Pub. Res. Code § 5401. Accordingly, the DEIS/R must discuss the Authority's obligation to replace any park land it should acquire with similar park land elsewhere. City of Fremont v. San Francisco Bay Area Transit Dist., 34 Cal.App.4th 1780, 1790 (legally adequate EIR where BART fully discussed obligation under the Public Park Preservation Act).

O051-6  
cont.

O051-7

**The DEIR/S Alternatives Directly Conflict With Public Resources Code Section 5019.62.**

Because several coastal State Park Units could be impacted by the HST, the DEIR/S needs to address limits to projects in these areas to only those that enhance recreational and educational values. Pub. Res. Code. § 5001.6(b)(11)(A).

The purpose of state seashores shall be to preserve outstanding natural, scenic, cultural, ecological, and recreational values of the California coastline as an ecological region and to make possible the enjoyment of coastline and related recreational activities which are consistent with the preservation of the principal values and which contribute to the public enjoyment, appreciation, and understanding of those values.

Improvements undertaken within state seashores shall be for the purpose of making the areas available for public enjoyment, recreation, and education in a manner consistent with the perpetuation of their natural, scenic, cultural, ecological, and recreational value. *Improvements which do not directly enhance the public enjoyment of the natural, scenic, cultural, ecological, or recreational values of the seashore, or which are attractions in themselves, shall not be undertaken.*

Pub. Res. Code § 5019.62 (emphasis added). This mandate is also incorporated into a number of the parks' General Plans. Accordingly, the HST alternatives which propose to go through a number of State Beaches would severely compromise their recreational and natural value, and are in direct conflict with State law.

**The DEIR/S Fails to Adequately Analyze Cumulative Analyses**

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 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

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**Comment Letter O051 Continued**

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 *Bozung v. Local Agency Formation Comm’n*, 13 Cal3d 263, 284 (1975).

Alternatively, an EIR may utilize 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. 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).

The DEIS/R fails to meet these requirements and only discusses present and future projects within the area that the HST would traverse. DEIR/S Appendix 3.17-A. Key transportation and other projects are omitted from the discussion and analysis (e.g. Expansion of LAX, MORE). As a result of this approach, the cumulative analysis is improperly narrow in scope and therefore underestimates and omits cumulative impacts.

**The DEIR/S Fails to Identify Adequate 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 DEIR/S identification and analysis of mitigation measures, like much of its analysis, is 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. The DEIR/S defers the description of all meaningful mitigation and relies on vague and “future” mitigation 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 (see DEIR/S text and Table 7.3-1):

- **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 DEIR/S does not take this into account.
- **Energy Use:** “Develop and implement energy conservation plan for construction.” Note that the amount of energy consumed for construction

O051-9 cont.

O051-10

(and operation) varies dramatically by alignment choice (due to substantially different topography), meaning the feasibility of this mitigation is highly dependent on alignment choice. The DEIR/S does not take this into account.

- **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.
- **Geology:** “Use of ground motion data and instruments; routine maintenance of tracks; slope reinforcement.”
- **Growth Potential:** “Work with local communities to encourage higher density development around stations.” Note that the potential for higher density development around stations is quite different depending on alignment and station location.
- **Hydrology and Water Resources:** “Avoid or minimize footprint in floodplains; conduct project-level analysis of surface hydrology and coastal lagoons; Best Management Practices...”
- **Section 4(f) and 6(f):** “Consider design options to avoid parkland and wildlife refuges; identify site specific mitigation measures.” Note that this is like closing the barn door after the cows have gotten out; once an alignment though a park or refuge has been chosen, the ability of alternative designs to mitigate impacts is vastly reduced.

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

- “Requirements” for agreements with cities/counties that 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 farmland protection, etc.). Explore possibility of funding in return for smart growth provisions in GPs;
- up-front purchase of conservation and agricultural easements to either side of the tracks;
- fees for additional purchase and stewardship of conservation and agricultural lands;
- Limits on any new stations.

Moreover, the DEIR/S includes inappropriate assumptions concerning the cost of mitigation measures for the alternatives. In fact, it appears that the DEIR/S improperly applied a standard 3% mitigation cost of all segments (except Dumbarton) rather than

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**Comment Letter 0051 Continued**

using detailed mitigation figures developed in background reports. For example, a 1995 Corridor Evaluation and Environmental Constraints Analysis provide detailed mitigation costs which vary significantly by study segments. The analysis states that mitigation costs are higher in urbanized areas where there are high value habitats which would require mitigation. Again, a revised DEIR/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.

**The DEIR/S Fails to Analyze Alternatives Adequately**

The DEIR/S fails to adequately analyze alternatives that have been included and fails to analyze a reasonable range of alternatives to the project. Although the DEIR/S analyzes a number of alternatives at an “equal” level of detail, the respective alternatives analyses fall short of the standards set by CEQA and NEPA. Under CEQA, an EIR must analyze a reasonable range of alternatives to the project, or to the location of the project, that would feasibly attain most of the basic objectives while avoiding or substantially lessening the project’s significant impacts. See Pub. Res. Code Section 21100(b)(4); CEQA Guidelines Section 15126.6(a); *Citizens for Quality Growth v. City of Mount Shasta*, 198 Cal.App.3d 433, 443-45 (1988). Similarly, under NEPA a reasonable range of alternatives that satisfy the statement of purpose and need must be analyzed. See above argument that the statement of purpose and need is improperly constrained, and therefore, the range of alternatives is also improperly constrained.

The DEIR/S fails to include an adequate analysis of alternatives for a number of reasons:

- The DEIR/S fails to include a reasonable range of feasible alternatives.
- Feasible alternatives are rejected without evidence.

In addition to its failure to adequately identify and analyze alternatives to the HST alignments and stations, the DEIR/S fails to identify the environmentally superior HST alignments and station location alternatives. The document does identify the HST alternatives as the environmentally superior alternative:

“Based on the evaluations documented in Chapter 3 of this Program EIR/EIS, the HST alternative has been identified as the environmentally superior alternative.” DEIR/S page 7-5; See also DEIR/S S-8 – HST is the preferred system alignment.

However, when it comes to alignments and station locations choices – choices which may be made relying on this DEIR/S, the document states:

“The Authority and the FRA continue to consider HST alignment and station options and have not identified a preference among those presented in the Draft Program EIR/EIS.” DEIR/S page S-8.

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cont.

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A revised and recirculated DEIR/S must identify the environmentally superior alignments and station locations as required by law.

**The DEIR/S fails to include a reasonable range of feasible alternatives**

The DEIR/S fails to include reasonable range of alternative alignments. For example, in the Bay Area, the DEIR/S fails to include the Altamont alternative. Elsewhere, the DEIR/S fails to include alignments and station locations that would avoid 4(f) and 6(f) resources. Under CEQA, an EIR must analyze a reasonable range of alternatives to the project, or to the location of the project, that would feasibly attain most of the basic objectives while avoiding or substantially lessening the project’s significant impacts. See Pub. Res. Code Section 21100(b)(4); CEQA Guidelines Section 15126.6(a); *Citizens for Quality Growth v. City of Mount Shasta*, 198 Cal.App.3d 433, 443-45 (1988). Similarly, under NEPA a reasonable range of alternatives that satisfy the statement of purpose and need must be analyzed. A revised DEIR/S must include a reasonable range of alternatives that would feasibly attain project objectives with fewer impacts.

Among the most glaring omissions is the omission of an Altamont alternative in the Bay Area. There is significant evidence that an Altamont alternative will actually result in the fewest environmental impacts and superior ridership and costs. Based on the 10 criteria used for screening alternatives (DEIR/S at S-2), an Altamont alternative, there is evidence in the record that Altamont is the superior Bay Area option with respect to at least the following:

- maximizing ridership and revenue potential;
- minimizing travel time to be competitive with other modes of travel;
- minimizing impacts on natural resources;
- minimizing adverse social and economic impacts (e.g. growth inducement);
- minimizing impacts on parks and cultural resources.

**THE DEIR/S SHOULD BE REDRAFTED AND RECIRCULATED**

The serious inadequacies of the DEIR/S are symptomatic of fundamental deficiencies in the project itself. The Authority may not approve the project unless the DEIR/S is again revised and recirculated to fully disclose and analyze the project’s impacts and a proper range of alternatives. Given the multiple inadequacies discussed above, this DEIR/S cannot properly form the basis of a final EIR. CEQA and the NEPA 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.

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cont.

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**Comment Letter O051 Continued**

Sampling of State Parks Impacted by HST

8/30/2004

State Park Unit Name	Alternative Alignment	HST_IMPACT
Candlestick Point SRA	San Jose to San Francisco	2395 Feet
Cardiff SB	Encinitas to Solana Beach	375 Feet
Carlsbad SB	Oceanside to Encinitas	206 Feet
Castaic Lake SRA	Bakersfield to Sylmar I-5 Corridor	2809 Feet
Chino Hills State Park	LA to March ARB	5 miles
Colonel Allensworth SHP	Tulare to Bakersfield	377 Feet
Cornfields	Sylmar-LA Silverlake Aerial, Cut and Cover	intersect
	Sylmar-LA Metrolink/UPRR under I-5 & SR11 South	885 Feet
	Sylmar-LA, Metrolink/UPRR, under I-5&SR11 East	548 Feet
	Metrolink/UPRR: Over I-5 & SR110	562 Feet
Doheny SB	Anaheim to Coceanside SJC to SD Line	56 Feet
	Anaheim to Oceanside SJC to SDCL I-5	3071 Feet
East Shore Park	San Jose to Oakland	2911 Feet
Fort Tejon SHP	Bakersfield to Sylmar I-5 Corridor	2.3 Miles
Henry W. Coe SP	Northern Tunnel Option	3.36 Miles
	Northern Tunnel Option	1.93 Mile
	Northern Tunnel Option	1584 Feet
	Tunnel Under Park Option	intersect
	Minimize Tunnel Option	intersect
	Pacheco Pass Option	1972 Fet
Hungry Valley SVRA	Bakersfield to Sylmar I-5 Corridor	intersect
Leland Stanford Mansion SHP	Sacramento to Stockton	1 Mile
Leucadia SB	Encinitas to Solana Beach	705 Feet
Loop Ranch Project	SF-58 Corridor	intersect
McConnell SRA	Newman to Merced	1 Mile
	San Jose to Merced	2723 Feet
Moonlight SB	Encinitas to Solana Beach	1 Mile
Old Sacramento SHP	Sacramento to Stockton	intersect
Old Town San Diego SHP	Oceanside to San Diego SR-52	intersect
Pacheco SP	Pacheco Pass Option	1 Mile
Pio Pico SHP	LA to March ARB	1 Mile
Placerita Canyon SP	Soledad Canyon Corridor	1 Mile
San Bruno Mountain SP	San Jose to San Francisco	1 Mile
San Clemente SB	Anaheim to Oceanside SJC to SD Line	intersect
San Elijo SB	Encinitas to Solana Beach	intersect
San Luis Reservoir SRA	SF 152 to Los Banos	intersect
San Onofre SB	Annaheim to Oceanside	intersect
San Pasqual Battlefield SHP	March ARB to Miramar Road	1 Mile
Carlsbad SB	Oceanside to Ens	intersect
State Indian Museum (SHP)	Sacramento to Stockton	1 Mile
Sutter's Fort SHP	Sacramento to Stockton	1 Mile
Taylor Yard	Sylmar-LA Metrolink/UPRR over I-5 & SR11	intersect
	Sylmar-LA Metrolink/UPRR under I-5 & SR11	intersect
Tomo-Kahni	SR 58 Corridor	intersect
Torrey Pines SB	Solana Bch to I-5/805 Split	intersect
Torrey Pines SR	Solana Bch to I-5/805 Split	intersect

**REQUEST FOR NOTIFICATION**

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

Elizabeth Goldstein, President, California State Parks Foundation  
 And  
 Barbara Hill, Vice-President, California State Parks Foundation  
 800 College Avenue PO Box 548  
 Kentfield, California 94914

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Respectfully,



Elizabeth Goldstein  
 President

CC: Ruth Coleman, Director, California Department of Parks and Recreation

Appendix I State Park Units, Alignment Routes, Impacts



## Response to Comments of Elizabeth Goldstein, President, California State Parks Foundation, August 30, 2004 (Letter O051)

### O051-1

The Authority's objectives include planning for a cost effective, prompt and reliable high-speed train service, but in a manner sensitive to and protective of natural resources, including those in our State Parks. Please see the Purpose and Need Statement, Section 1.2.1 of the Final Program EIR/EIS and objectives used to describe alternatives for study (Section 2.3.2C).

The Authority has identified a preferred HST alignment extending over 700-miles long. Of the 278 State Parks, five State Parks would be within 900 feet of the preferred high-speed train alignment<sup>1</sup>, and no State Parks would be crossed or bisected by the preferred alignment for the proposed system. While the Program EIR/EIS has identified these five State Parks as being potentially impacted by the proposed HST system, it is an objective of the Authority for the HST system to avoid impacts to State Parks to the extent feasible.

A high-speed rail system is needed to help meet California's future travel and commerce demands while reducing energy consumption and pollution and could positively influence community growth patterns which otherwise may increasingly reduce open space, wildlife habitat and public park opportunities. Some of the numerous steps the Authority has taken to avoid impacts to State Parks are described below.

The development of high-speed train alignment and station options for the Draft Program EIR/EIS included an extensive screening analysis in which many alignment and station options were eliminated from further consideration due to several criteria, including high potential for impacts on park and recreational

resources. Avoidance of potential impacts on park and recreational resources was a consideration throughout the preparation of the Draft Program EIR/EIS and the recent public process to identify preferred alignments for the proposed system that has been included in this Final Program EIR/EIS. Future project-level environmental review will provide further opportunities to avoid and minimize the potential effects to parks, as more specific alignments and facilities are considered.

Explicit actions the Authority has taken to date to further reduce potential impacts to State Park units include:

- The Authority is not pursuing any extension of the high-speed rail system south of Irvine in the existing coastal corridor, primarily due to the great potential for impacts to coastal environmental resources, including ten State Beaches and a State Reserve. This action was taken in 2002 and was documented in the Draft Program EIR/EIS.
- The two potential high-speed train alignments crossing through Henry Coe State Park have been dropped from further analysis.
- Three state park units identified as potentially impacted in the Draft Program EIR/EIS are located along the I-5 alignment option between Bakersfield and Sylmar, which was not identified as the preferred alignment option through the southern mountain crossing. The alignment via the Antelope Valley was chosen as the preferred alignment in part because it avoids parklands, including Hungry Valley, Castaic, and Fort Tejon State Parks as well as Pyramid Lake and Angeles National Forest.

<sup>1</sup> The distance 900 feet on each side of centerline of the alignment option is based on the approximate extent of indirect impacts due to noise generated by the proposed HST operations (see Section 3.16.1.B of the Final Program EIR/EIS regarding the methods of evaluation).

- The Authority has identified the MTA/Metrolink alignment, which avoids the Cornfields property, as the preferred alignment from Sylmar to Union Station<sup>2</sup>.

Of California's 278 State Parks, the five State Parks that are within 900 feet of the over 700-mile long preferred high-speed train system of alignment are: San Luis Reservoir State Recreation Area, Old Town San Diego, Colonel Allensworth, Taylor Yard, and McConnell State Recreation Area. The San Luis Reservoir State Recreation Area is within a broad corridor between the Bay Area and the Central Valley identified for further investigation. This corridor is generally bounded by the Pacheco Pass (SR-152) to the South and the Altamont Pass (I-580) to the North. The high-speed rail alignments studied as part of the Program EIR/EIS did not go through San Luis Reservoir State Recreation Area and any further analysis in this area will focus on alignment options that avoid this, and other State Parks. For the other four State Parks, the proposed high-speed rail alignment would be within existing, heavily used rail corridors, adjacent to the State Parks. The addition of high-speed rail in these corridors is not expected to greatly alter the environmental effects of these existing rail lines and we strongly believe that using existing rail corridors minimizes environmental impacts.

The analysis methodology applied in the Program EIR/EIS was developed to identify and highlight areas of potential impact to be avoided and/or considered further during subsequent project level environmental review. If this proposed project is carried to a project level of environmental review, preliminary engineering will be conducted allowing for a greater precision in the location of the proposed HST facilities and their associated impacts. The project level analysis will provide a more detailed analysis of the 4(f) and 6(f) potential direct and indirect affects. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and

<sup>2</sup> Between Burbank and Los Angeles Union Station, the MTA/Metrolink alignment refers to a relatively wide corridor within which alignment variations will be studied at the project level.

mitigate potential affects to 4(f) and 6(f) resources. Please see additional discussions of "design practices" commitments and mitigation strategies in Chapter 3 of the Final Program EIR/EIS, and construction methods in Section 3.18.

Deferment of identification of specific impacts to project level analysis is appropriate given the level of specificity that can be achieved at this program level. The subsequent preliminary engineering and project level environmental review will provide further opportunities to avoid and minimize the potential effects to 4(f) and 6(f) resources, as more specificity is defined for proposed alignments and facilities.

Your comment letter stated, "we believe upwards of 40 and perhaps many more State Parks are either directly or indirectly impacted" and 35 are listed in your attached Appendix I "State Park Units, Alignment Routes, Impacts". However, when considering the preferred HST alignment, this appendix includes: 11 coastal State Park Units south of Irvine that would not be impacted by the HST system; 3 State Park Units along the I-5 alignment option between Bakersfield and Sylmar that was not identified as part of the preferred alignment (Castaic Lake SRA, Fort Tejon SHP, and Hungry Valley SVRA); "Cornfields" where the alignment option that bisected this park was not identified as part of the preferred HST alignment; 8 State Park Units in heavily urbanized areas where the HST system would operate at reduced speeds and have no negative direct impacts, no expected indirect impacts, and could be beneficial for park visitation; 2 properties that are not State Park Units (Tomo-Kahni and Loop Ranch Project); and 4 State Park Units that are 1-5 miles from the proposed HST alignment.

The list of State Parks attached as Appendix I noted 15 of the 35 State Parks as having the HST alignment "intersect" the State Park. However, when considering the preferred HST alignment, this list includes: 6 coastal State Park Units south of Irvine that would not be impacted by the HST system; Henry Coe State Park where alignments through this State Park have been eliminated from further investigation; 1 State Park Unit along the I-5 alignment between Bakersfield and Sylmar that was not selected as part of the

preferred HST alignment (Hungry Valley SVRA); 2 properties that are not State Park Units (Tomo-Kahni and Loop Ranch Project); “Cornfields” where the alignment option that bisected this park was not identified as part of the preferred HST alignment, and the remaining 4 State Parks (Old Sacramento SHP, Old Town San Diego SHP, San Luis Reservoir SRA, and Taylor Yard) are adjacent to the HST alignment rather than “intersecting” the State Park.

The following is some additional detail regarding 8 of the urban State Parks listed in Appendix I:

Candlestick Point SRA: this State Park is located about 6 miles north of SFO along the Bay side of the SF Peninsula. Not only is this State Park about 2,400 ft from the proposed HST service on the existing Caltrain alignment, HST trains operating at speeds less than 100 mph would make less noise than existing Caltrain and freight trains and US 101 is between the State Park and the Caltrain alignment.

East Shore Park: this State Park is located just north of the Oakland side of the existing Bay Bridge along and in the bay. Not only do the HST design options terminate south of the State Park (at the West Oakland or 12<sup>th</sup> Street/City Center BART Station locations) where all trains would stop (1-2 miles from the State Park), but the State Park is also bounded by one of the busiest freeways in Northern California, Interstate 80.

Leland Stanford Mansion SHP: this State Park is located about 1 mile from the proposed HST terminus station in Sacramento where all trains would stop and would be running at very slow speeds. This State Park is less than a mile from Interstate 5/SR-99.

Old Sacramento SHP: this State Park is very near the existing Amtrak Sacramento Station (SP Depot) which is the site for the HST Sacramento terminus station where all HST trains would stop. However, not only would HST trains be traveling at very slow speeds, Old Sacramento is separated from the existing rail station by Interstate 5/SR-99 (the busiest freeway in the Sacramento region) on an aerial structure.

San Bruno Mountain SP: this State Park is located this State Park is located about 3 miles north of SFO along the Bay side of the SF Peninsula. HST service on the existing Caltrain alignment would operate at reduced speeds (100 mph or less in this segment) and HST trains would make less noise than existing Caltrain and freight trains. Moreover, US 101 is between this State Park and the Caltrain alignment.

San Pasqual Battlefield SHP: this State Park is located several miles from the proposed HST alignment which would be in the I-15 freeway corridor where trains would be running at reduced speeds (100-150 mph).

State Indian Museum SHP: this State Park is located about 1 mile from the proposed HST alignment, near the terminus station in downtown Sacramento where the HST trains would be traveling at very slow speeds. Moreover, this State Park is one block from Interstate 80 (a very busy elevated freeway).

Sutter Fort SHP: this State Park is located about 1 mile from the proposed HST alignment, near the terminus station in downtown Sacramento where the HST trains would be traveling at very slow speeds. Moreover, this State Park is one block from Interstate 80 (a very busy elevated freeway).

#### **O051-2**

The analysis methodologies applied in the Program EIR/EIS were developed based on the level of specificity of the location and design of proposed facilities. For Section 4(f) and 6(f) resources all resources within 900 feet on either side of the centerline of each alignment option were identified. Section 2.6, Section 2.7.3, Chapter 6, and Chapter 6A of the Program EIR/EIS clearly defines the alignment and station options considered and preferred alignment and station options, respectively. Further detail regarding the configuration of the proposed facilities is illustrated in the “Alignment Configuration and Cross Sections” technical report, January, 2004. Please also see response to Comment O051-1 and standard response 3.15.13.

**O051-3**

In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include specific mitigation strategies that would be applied in general for the HST system. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. At this level of design it is premature to develop more specific mitigation measures for specific potential effects. Only once there is a more detailed analysis of the alignment and avoidance and minimization efforts have been exhausted, will specific mitigation be addressed. Also see comment O029-4 regarding the further examination of alignment options.

Because the proposed HST system would not be operational until the year 2020, the affected environment discussions describe both the existing conditions as of 2003 and, where appropriate and not overly speculative, the anticipated 2020 conditions that would pertain when the project becomes operational. For disciplines where projections of future changes in existing conditions would be overly speculative, the existing 2003 conditions were used as a proxy for the 2020 conditions. For some disciplines—such as transportation, energy, air quality, and land use—future conditions are routinely projected in adopted regional or local planning documents or are forecast by public agencies. In these cases, the existing conditions and the projected 2020 conditions were used as the basis for impact analysis. The technical studies prepared for each region and addressing each resource area provided key information for the preparation of the affected environment discussions.

The environmental consequences discussions describe the potential environmental impacts (both adverse and beneficial) of the Modal and HST Alternatives in comparison to the No Project Alternative and compared to each other. Each discussion begins by comparing existing conditions with 2020 No Project conditions to describe the consequences of No Project and how environmental conditions are expected to change during the timeframe required to bring the proposed HST system online. As described above, existing (2003) conditions were used as a proxy for 2020 No Project conditions

where 2020 baseline information was unavailable, could not be projected, or would be overly speculative. Using 2020 No Project conditions as a basis for comparison, the analysis of impacts then addresses direct and indirect impacts for the proposed HST and Modal Alternatives, as well as potential cumulative impacts.

**O051-4**

Section 3 of the PEIR/S programmatically evaluates the potential for direct and indirect impacts of the No Project, HST and Modal Alternative. Please see standard response 3.15.2 and standard response 3.15.13 regarding the level of analysis and the intended uses of the PEIR/s. Please see responses to Comments AS004 – 45 regarding the addition of a construction section and response to Comment AS004 – 46 regarding the addition of a discussion of HST support facilities to the PEIR/S. Please see response to Comment AS004 – 50 regarding privately owned conservation lands. Please see response AF009 – 26 regarding threatened vs. endangered species. Please see standard response 3.15.10 regarding use of habitat conservation plans, natural community conservation plans (NCCP), and other approved local, regional, or state habitat conservation plans. Please see responses to Comments AF007 – 5, AS012 – 12, and AL072 – 8 and standard response 3.15.7 regarding impacts to wetlands. Please see standard responses 3.15.2, 3.15.3, 3.15.4, 3.15.9, and 3.15.11 and response to Comments AS004 – 46, 47, 48, 49, & 51, AS012 – 7, 8, 9, 12, & 17 and O034 – 3 & 4 regarding impacts to wildlife and wildlife corridors and habitat fragmentation. The Co-lead agencies acknowledge the importance of detailed comments regarding biological resources that are embodied in this comment. These issues will be addressed in the subsequent studies and project-level, Tier 2 studies for selected HST alignment options.

**O051-5**

Please see standard response 3.15.13. Please see response to Comment O015 – 4 and standard response 3.15.7 regarding the land use impact evaluation envelope. Please see response to Comment AL063 – 1 and 14 regarding review of local and regional plans.

Please note that the Authority has dropped from future consideration the previous alignment options passing through Henry Coe State Park and the Orestimba State Wilderness. The scope of study, extent of study area and localized impacts to specific properties will be addressed in the subsequent studies and project-level, Tier 2 studies to be completed for selected HST alignment and station options.

**O051-6**

See response to Comment O051-1.

**O051-7**

The Public Park Preservation Act of 1971 is addressed in section 3.16.1 subsection A. "Regulatory Requirements." Since the Public Park Preservation Act and Section 4(f) and 6(f) involve similar resources, further project-level analysis of potential impacts to the resources identified in this section would address both laws.

**O051-8**

All of the potentially impacted coastal state park units occur along the LOSSAN rail corridor between Irvine and San Diego. The Authority is not pursuing any extension of the high-speed rail system south of Irvine in this corridor, primarily due to the potential for considerable impacts to environmental resources, including state parks. Conventional rail infrastructure improvements are being pursued by others. See Standard Response 6.42.1.

For the program level analyses, the resources identified under the Section 4(f) and 6(f) section which also are State Park seashore properties would also be subject to the Public Code § 5001.6(b) (11) (A). Project level environmental analysis will examine these resources in detail and apply federal and state laws to address the potential impacts and appropriate actions regarding California State Beaches.

**O051-9**

See Standard Response 3.17.1.

**O051-10**

See Response O051-3

**O051-11**

The Program EIR/EIS describes the extensive procedures used to identify alternatives for study. This process satisfied/s CEQA and NEPA requirements (see Response O051-1). The Draft Program EIR/EIS identified a preferred system alternative (HST), however, identification of a preferred system of HST alignment and station options was deferred to the Final Program EIR/EIS in order to consider public and agency comment. Chapter 6A defines the preferred system of HST alignment and station locations. The environmentally superior alternative is identified in Section 7.3.3. Specific environmentally superior alignment options will be identified at the subsequent project level environmental review, when precise alignments would be defined.

**O051-12**

Regarding a reasonable range of alternatives, the Authority has considered hundreds of HST alignment and station options through the screening process and program level analysis (see response to Comment O051-1 and response to Comment O051-11).

Regarding the Altamont Pass, see Standard Response 2.18.1 and 6.3.1.

**O051-13**

The co-lead agencies respectfully disagree that recirculation of the Draft Program EIR/EIS is required. The State Parks Foundation will be kept on the distribution list for future information and announcements regarding the project. All notices and information will be sent to:

Elizabeth Goldstein, President  
And  
Barbara Hill, Vice-President

California State Parks Foundation  
800 College Avenue  
P.O. Box 548  
Kentfield, California 94914



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

Comment Letter O052

O052

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VIA FAX AND FED EX

August 31, 2004

Chairman Joseph E. Petrillo and
Members of the High Speed Rail Authority
Mehdi Morshed, Executive Director
925 L Street, Suite 1425
Sacramento, CA 95814

Allan Rutter, Administrator
Federal Railroad Administration
U.S. Department of Transportation
1120 Vermont Avenue, N.W. M/S 20
Washington, D.C. 20590

Re: Comments on the Draft Program EIR/EIS for the California High Speed Train and the Impact on the State Parks in the Cornfield and Taylor Yard

Dear Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority:

The Center for Law in the Public Interest submits the attached comments on behalf of a diverse alliance of social justice, environmental, and community organizations that includes (partial list) the Anahuak Youth Soccer Association, City Parks Alliance, Concerned Citizens of South Central Los Angeles, Friends of the Los Angeles River, Glassell Park Improvement Association, Los Angeles Metropolitan Churches, National Association for Olmsted Parks, and Planning and Conservation League regarding the California High Speed Train Draft Program Environmental Impact Report and Environmental Impact Statement.

Very truly yours,

[Handwritten signature of Robert Garcia]

Robert Garcia
Executive Director

Enclosure

August 31, 2004

Chairman Joseph E. Petrillo and
Members of the High Speed Rail Authority
Mehdi Morshed, Executive Director
925 L Street, Suite 1425
Sacramento, CA 95814

Allan Rutter, Administrator
Federal Railroad Administration
U.S. Department of Transportation
1120 Vermont Avenue, N.W. M/S 20
Washington, D.C. 20590

Re: Comments on the Draft Program EIR/EIS for the California High Speed Train and the Impact on the State Parks in the Cornfield and Taylor Yard

Dear Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority:

I. Overview

The Center for Law in the Public Interest submits these comments on behalf of (partial list) the Anahuak Youth Soccer Association, City Parks Alliance, Concerned Citizens of South Central Los Angeles, Friends of the Los Angeles River, Glassell Park Improvement Association, Los Angeles Metropolitan Churches, National Association for Olmsted Parks, and Planning and Conservation League regarding the California High Speed Train Draft Program Environmental Impact Report and Environmental Impact Statement ("DEIS/R").

We focus specifically in these comments on the potential impact of the proposed high speed train ("HST") on the new State Parks in the Cornfield and Taylor Yard along the Los Angeles River and the surrounding communities. However, our concerns extend to potential impacts on each of the state parks identified below, and on the environmental justice analysis generally.

Many public leaders see the revitalization of the Los Angeles River corridor as a key to the economic and environmental enhancement of Los Angeles, and a thread that could provide Los Angeles with a greater sense of community. Central to the River's revitalization is the Cornfield, a site from which the history of Los Angeles flows, and Taylor Yard, which stretches for two miles along the River's banks.

O052-1

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U.S. Department of Transportation
Federal Railroad Administration

## Comment Letter O052 Continued

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
 Re: *California High Speed Train Draft EIR/EIS and Impact on the Cornfield and Taylor Yard*  
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Taylor Yard is adjacent to one of last remaining remnants of soft-bottomed, riparian channels in the predominately concrete Los Angeles River. Over 300 species of birds find this section of river an essential stopover along the Pacific Flyway. Migrating birds stop for food and rest, and some birds are found year-round, nesting and breeding. About half of the total recorded birds in Los Angeles County have even been spotted along the soft-bottomed portions of the river.<sup>1</sup>

A high speed train will undoubtedly have adverse impacts on the Cornfield and Taylor Yard. The DEIS/R does not analyze what those impacts are. It must.

The California Department of Parks and Recreation recognizes that the HST will have adverse environmental justice impacts on the Cornfield and Taylor Yard and surrounding communities:

Proposed alternative HST corridors impacting both the Taylor Yard and Cornfield properties clearly raise the environmental justice issue.

The children of the Cornfield/Taylor Yard community are disproportionately low income children of color. The community within a five mile radius of the Cornfield is 68% Latino, 14% Asian, 11% non-Hispanic white, and 4% African-American with thirty percent of the population below poverty level as compared to 14% for the State of California as a whole. Within five miles of the Cornfield there are 282,967 children and 235,000 children within five miles of Taylor Yard.

Yet, to serve this population, Los Angeles has fewer acres of parks per thousand residents than any major city in the United States, having less than one acre of park per thousand residents. The National Recreation and Park Association standard is ten acres per thousand population. Compare this standard to the 0.9 acres per thousand in the community surrounding Cornfield and the 0.3 acres of parks per thousand residents surrounding Taylor Yard (one of the least park-served areas in Los Angeles) with the 1.7 acres in disproportionately white and relatively wealthy parts of Los Angeles.

The California Department of Parks and Recreation recognizes that the Greater Los Angeles Region is an area that is under-served in regard to park facilities and that many of the area's residents, particularly those least able to afford it, are either unaware of, or feel isolated from, state and federal parklands and recreational facilities. This Department on behalf of the people of the State of California has invested \$78,000,000 in the purchase of the Taylor Yard/Cornfield properties in this decade specifically to address these disparities. **This effort will be undone unless alternative routing or a fully subterranean system is chosen to bypass all impacts to these properties.**

Comments submitted by Ruth Coleman, Director, California Department of Parks and Recreation, August 19, 2004 (emphasis added).

The DEIS/R fails to provide the public with a clear and full disclosure of the impacts of high speed rail

<sup>1</sup> Comments submitted by Ruth Coleman, Director, California Department of Parks and Recreation, August 19, 2004 ("State Parks Comments").

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
 Re: *California High Speed Train Draft EIR/EIS and Impact on the Cornfield and Taylor Yard*  
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on environmental quality, environmental justice, active recreation, and human health. A revised DEIS/R should be drafted and re-circulated to the public. The authorities must meaningfully address the environmental and social justice concerns and the impacts on state parks including the Cornfield and Taylor Yard.

We present our vision for urban parks and open space in Part II below. Part III summarizes relevant legal standards. Part IV presents specific comments concerning the Cornfield and Taylor Yard.

We incorporate by reference the comments submitted by the Planning and Conservation League.

## II. Our Vision and the Values at Stake

### A. Our Vision

We are guided by a collective vision for a comprehensive and coherent web of parks, beaches, forests, and other open space, schools with playing fields and playgrounds, and transit that serves the diverse needs of diverse users and reflects the cultural urban landscape. Los Angeles is park poor, and there are unfair disparities in access to parks and other open space benefits based on race, ethnicity, income, access to a car, and other factors.

Our vision is inspired in part by the classic 1930 report *Parks, Playgrounds, and Beaches for the Los Angeles Region* by Olmsted Brothers and Bartholomew & Associates. The Olmsted Plan envisioned a comprehensive and coherent regional system of open space and transportation to promote the social, economic and environmental vitality of Los Angeles and the health of its people. According to the Olmsted Report in words that remain true today:

Continued prosperity [in the Los Angeles region] will depend on providing needed parks, because, with the growth of a great metropolis here, the absence of parks will make living conditions less and less attractive, less and less wholesome. . . . In so far, therefore, as the people fail to show the understanding, courage, and organizing ability necessary at this crisis, the growth of the Region will tend to strangle itself.<sup>2</sup>

Implementing the Olmsted vision would have made Los Angeles one of the most beautiful and livable regions in the world. California's state park system, which was designed by Frederick Law Olmsted, Jr. and served as a model for other states,<sup>3</sup> is in jeopardy under the proposed DEIS/R. Powerful private interests and civic leaders demonstrated a tragic lack of vision and judgment when they killed the Olmsted Report in Los Angeles. Developing a HST without adequately addressing the impact on state parks like the Cornfield and Taylor Yard would demonstrate a similar lack of vision and judgment.

One of the broadest and most diverse alliances ever behind any issue in Los Angeles is working to restore a part of the Olmsted vision and the lost beauty of Los Angeles. We stopped warehouses to create the State Park in the 32-acre Cornfield. The *Los Angeles Times* called the Cornfield "a heroic

<sup>2</sup> Olmsted Brothers and Bartholomew & Associates, *Parks, Playgrounds, and Beaches for the Los Angeles Region 1* (1930), reprinted in Greg Hise & William Deverell, *Eden by Design* 83 (2000).

<sup>3</sup> Charles A. Birnbaum, FASLA and Robin Karson, *Pioneers of American Landscape Design* at 275 (2000).

O052-1  
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## Comment Letter O052 Continued

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
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monument" and "a symbol of hope." We stopped a commercial project to create a 40 acre park as part of a planned 103-acre park in Taylor Yard along the 51 mile Los Angeles River Parkway. We understand that the Los Angeles Unified School District ("LAUSD") has purchased a parcel of land in Taylor Yard to build a new high school.

### B. The Values at Stake

According to a recent survey on Californians and the environment by the influential California Public Policy Institute, 64% of Californians say that poorer communities have less than their fair share of well-maintained parks and recreational facilities. Latinos are far more likely than non-Hispanic whites (72% to 60%) to say that poorer communities do not receive their fair share of these environmental benefits. A majority of residents (58%) agree that compared to wealthier neighborhoods, lower-income and minority neighborhoods bear more than their fair share of the environmental burdens of toxic waste and polluting facilities.<sup>4</sup>

Communities of color and low income communities have been among the biggest supporters of bonds for open space, clean air, and clean water in the past several years. California's recent Proposition 40, for example – the largest resource bond in United States history, with \$2.6 billion for parks, clean water and clean air – passed in March 2002 with the support of 77% of black, 74% of Latino voters, 60% of Asian, and 56% of non-Hispanic white voters. Seventy-five percent of voters with an annual family income below \$20,000 and 61% with a high school diploma or less supported Prop 40 – the highest among any income or education levels.<sup>5</sup>

Prop 40 demolished the myth that the environment is a luxury that communities of color and low income communities cannot afford or are not willing to pay for.

The struggles for the parks in the Cornfield and Taylor Yard demonstrate that low income communities and communities of color who never participated in government before are fighting city hall and wealthy developers – and winning.

In an effort to maximize limited open space resources and achieve environmental and social justice in Los Angeles, we are working to unite the rich cultural, historical, recreational, and environmental resources in the heart of Los Angeles through a Heritage Parkscape—like the Freedom Trail in Boston—that will link the Cornfield, Taylor Yard, the Los Angeles River, the Zanja Madre or "mother trench" that provided water for early L.A., El Pueblo Historic Park and Olvera Street, old and new Chinatown, Little Tokyo, Elysian Park, Chavez Ravine, Confluence Park, the Arroyo Seco parkway, Debs Park, Ascot Hills, and Biddy Mason Park, along with 100 other sites. Public art projects including murals, photo exhibits and installations on the ground and on the web, school art projects, oral histories, and theater will be part of this living legacy. The Heritage Parkscape will serve as a "family album" to commemorate the struggles, hopes and triumphs of the settlers and later immigrants who entered Los Angeles through this area.

<sup>4</sup> Mark Baldasare, Public Policy Institute of California Statewide Survey: Special Survey on Californians and the Environment at vi (June 2002).

<sup>5</sup> *L.A. Times* state-wide exit poll, March 7, 2002.

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
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The Heritage Parkscape will serve as a "family album" to commemorate the struggles, hopes and triumphs of the settlers and later immigrants who entered Los Angeles through this area. The Heritage Parkscape illustrates the power of place: "the power of ordinary urban landscapes to nurture citizens' public memory, to encompass shared time in the form of shared territory . . . . And even bitter experiences and fights communities have lost need to be remembered -- so as not to diminish their importance." The Heritage Parkscape revives the forgotten history of Los Angeles. The footprint of the Heritage Parkscape coincides closely with the Olmsted vision for downtown.

The beauty of the earth, the glory of the sky, the serenity of the river, the joy of the people, and the future of our children are bringing people together to create the kind of community where they want to live and raise children. Parks are not a luxury. People in parks play, walk, talk, kiss, sit, jog, bike, learn, bird, protest, pray, or work. Parks are a democratic commons that provide a different rhythm for everyday life and bring people together as equals. Parks cool the city and clean the air and ground. Sports improve human health and academic performance; increase access to higher education; inspire players and fans; provide lessons in teamwork, leadership, and self-esteem; and provide an alternative to gangs, crimes, drugs, violence, and teen sex. Nearly 40% of California children are not physically fit and more than 25% are overweight, facing diseases including diabetes, blindness and amputations. Parks provide opportunities for recreation and physical activity. Sports are among the most valued cultural resources in many communities. New Latino immigrants do not organize politically, they first organize soccer leagues. Sports help desegregate society. Jackie Robinson broke baseball's color barrier seven years before *Brown v. Board of Education* declared "separate but equal" unconstitutional. Parks promote economic vitality and create quality jobs in surrounding communities. Social justice and stewardship of the earth have motivated spiritual leaders including Nobel Peace Prize Laureate Rigoberta Menchú, Cardinal Roger Mahony, and the Justice and Peace Commission of the Catholic Archdiocese of Los Angeles to actively support the creation of state parks in the Cornfield and Taylor Yard.<sup>6</sup>

### III. The Legal Standards

The DEIS/R is invalid under federal and state environmental, environmental justice, and civil rights laws.

Then-Secretary Andrew Cuomo of the United States Department of Housing and Urban Development recognized that the principle of equal justice must be implemented in developing the Cornfield. Secretary Cuomo withheld federal funding for the warehouse proposal unless the City of Los Angeles and Majestic Realty conducted a "full-blown" assessment of the impact of the proposed development on communities of color and low-income communities, including the park alternative. Secretary

<sup>6</sup> See generally Robert Garcia and Thomas A. Rubin, "Crossroad Blues: The MTA Consent Decree and Just Transportation," chapter in Karen Lucas, ed., *Running on Empty: Transport, Social Exclusion, and Environmental Justice* (2004); Robert Garcia et al., "Community, Democracy and the Urban Park Movement," chapter in Dr. Robert Bullard's forthcoming book on Environmental Justice to be published by the Sierra Club; Robert Garcia et al., *The Cornfield and the Flow of History: People, Place, and Culture*, Center for Law in the Public Interest (2004) (available at [www.clipi.org](http://www.clipi.org)); Robert Garcia et al., *Dreams of Fields: Soccer, Community, and Equal Justice*, Center for Law in the Public Interest (2002) (available at [www.clipi.org](http://www.clipi.org)); Robert Garcia, *Equal Access to California's Beaches* (2002), published in the Proceedings of the Second National People of Color Environmental Leadership Summit - Summit II ([www.ejrc.cau.edu/summit2/Beach.pdf](http://www.ejrc.cau.edu/summit2/Beach.pdf)).

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## Comment Letter O052 Continued

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
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Cuomo acted after members of the Chinatown Yard Alliance filed an administrative complaint claiming the warehouse project was the result of discriminatory land use policies that had long deprived communities of color and low-income communities of parks under federal civil rights, environmental justice, and environmental laws.<sup>7</sup> Then-State Senator Tom Hayden emphasized in a letter to Secretary Cuomo that public funds should not be used to perpetuate and worsen the longstanding practice in Los Angeles of unlawfully depriving inner city residents of equal access to parks and open space.<sup>8</sup>

### A. Federal and State Environmental Laws

The DEIS/R does not comply with the California Environmental Quality Act ("CEQA")<sup>9</sup>; the CEQA Guidelines, California Code of Regulation, Title 14, Section 15000 *et seq.*; the National Environmental Policy Act ("NEPA")<sup>10</sup>, and the NEPA regulations. The DEIS/R must be revised and re-circulated.<sup>11</sup>

#### 1. National Environmental Policy Act

NEPA commits the federal government to "encourage productive and enjoyable harmony between man and his environment" and "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man."<sup>12</sup> To realize these goals, NEPA demands that the "policies, regulations, and public laws of the United States [be] interpreted and administered" in accordance with its principles, "to the fullest extent possible."<sup>13</sup> This strong mandate was intended to guide agencies in preparing an EIS, which is required of all projects that "may significantly degrade some human environmental factor."<sup>14</sup> As the Supreme Court has explained:

NEPA's instruction that all federal agencies comply with the impact statement requirement—and with all the other requirements of § 102—"to the fullest extent possible," 42 U.S.C. § 4332, is neither accidental nor hyperbolic. Rather the phrase is a deliberate command that the duty NEPA imposes upon the agencies to consider environmental factors not be shunted aside in the bureaucratic shuffle.<sup>15</sup>

The fundamental purpose of an EIS is to force the decision maker to take a "hard look" at the environmental consequences of her proposal, before a decision to proceed is made.<sup>16</sup> The EIS must be

<sup>7</sup> Letter from Office of the Secretary, United States Department of Housing and Urban Development, to Los Angeles Deputy Mayor Rocky Delgadillo Re: City of Los Angeles – Section 108 Application – Cornfields B-99-MC-06-0523, Sep. 25, 2000.

<sup>8</sup> Letter from State Senator Tom Hayden to HUD Secretary Andrew Cuomo, July 18, 2000.

<sup>9</sup> Cal. Pub. Res. Code § 21000 *et seq.*

<sup>10</sup> 42 U.S.C. § 4321 *et seq.*

<sup>11</sup> The DEIS/R's failure adequately to meet these disclosure requirements makes it virtually impossible to make an informed comparison between the various proposed alternatives. Our comments therefore will not attempt such a comparison. Rather, these comments will address the adequacy of the discussion of potential impacts, and the specificity and enforceability of the mitigation and benefits proposed to offset these impacts.

<sup>12</sup> 42 U.S.C. § 4321

<sup>13</sup> 42 U.S.C. § 4332.

<sup>14</sup> *Steamboaters v. F.E.R.C.*, 759 F.2d 1382, 1392 (9th Cir. 1985) (emphasis in original).

<sup>15</sup> *Flint Ridge Development Co. v. Scenic Rivers Ass'n*, 426 U.S. 776, 787 (1976)

<sup>16</sup> See 40 C.F.R. § 1502.1; *Baltimore Gas & Electric v. Natural Resources Defense Council*, 462 U.S. 87, 97 (1983).

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an objective, neutral document, not a work of advocacy to justify a predetermined result.<sup>17</sup> To help achieve this goal, NEPA sets forth a list of factors that the responsible official must consider "to the fullest extent possible" and include in a "detailed statement"<sup>18</sup>

- (i) the environmental impact of the proposed action;
- (ii) any adverse environmental effects which cannot be avoided should the project be implemented;
- (iii) alternatives to the proposed action;
- (iv) and the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

The duty to consider "alternatives to the proposed action"—to "rigorously explore and objectively evaluate all reasonable alternatives"<sup>19</sup>—lies, in the words of the regulators, at "the heart" of the entire assessment process.<sup>19</sup> Agencies must "devote substantial treatment to each alternative" and provide support for their decisions to accept or reject them.<sup>20</sup>

In addition, an EIS must be sufficiently intelligible to allow the public to effectively comment upon it.<sup>21</sup> Thus, "an EIS must be organized and written so as to be readily understandable by the governmental decision makers and by interested non-professional laypersons likely to be affected by actions taken under the EIS."<sup>22</sup>

Federal agencies shall to the fullest extent possible "[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment."<sup>23</sup> In addition, federal agencies shall "[u]se all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment."<sup>24</sup> "Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.<sup>25</sup> Economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.<sup>26</sup>

<sup>17</sup> 40 C.F.R. § 1502.2(g).

<sup>18</sup> 42 U.S.C. § 4332(2)(C).

<sup>19</sup> 40 C.F.R. § 1502.14.

<sup>20</sup> 40 C.F.R. § 1502.14(b); *Natural Resources Defense Council v. Callaway*, 524 F.2d 79, 93 n.12 (2nd Cir. 1975).

<sup>21</sup> 40 C.F.R. § 1502.8.

<sup>22</sup> *Oregon Environmental Council v. Kunzman*, 817 F.3d 484, 494 (9th Cir. 1987).

<sup>23</sup> 40 C.F.R. § 1500.2(e).

<sup>24</sup> 40 C.F.R. § 1500.2(f).

<sup>25</sup> See 40 C.F.R. § 1508.8.

<sup>26</sup> 40 C.F.R. § 1508.14.

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Environmental effects are interpreted broadly to include economic, social and other environmental justice considerations. The "effects" to be analyzed include "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative."<sup>27</sup> NEPA analysis shall include discussions of the direct environmental effects and their significance, the indirect effects and their significance, the environmental effects of alternatives including the proposed action, and urban quality, historic and cultural resources, and the design of the built environment.<sup>28</sup> The Council on Environmental Quality created the following guiding principles for environmental justice analyses under NEPA:<sup>29</sup>

- (i) consideration of the racial composition of the area affected by the proposed action, and whether there may be a disproportionate impact on minority populations;
- (ii) consideration of relevant public health and industry data and the potential for exposure to environmental hazards;
- (iii) consideration of "the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action";
- (iv) development of "effective public participation strategies";
- (v) assurance of "meaningful community representation in the process"; and
- (vi) assurance of tribal representation in the process in a manner that is consistent with the government-to-government relationship between the United States and tribal governments, the federal government's trust responsibility to federally-recognized tribes, and any treaty rights.

### 2. California Environmental Quality Act

CEQA and NEPA contain parallel requirements mandating that an environmental review accompany proposals for major federal and state actions significantly affecting the environment. The DEIS/R is to serve as "an environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."<sup>30</sup>

The DEIS/R does not fulfill the basic requirements of CEQA and NEPA as it fails to provide enough information to adequately inform decision-makers and the public of the range of impacts resulting from the project. Simply put, the analysis in the DEIS/R is insufficient to fulfill the purposes for which it was drafted – to adopt the HST Alternative and select preferred HST corridors/alignments and general station locations.<sup>31</sup> The High Speed Rail Authority ("Authority") and the Federal Rail Administration ("FRA") have not "demonstrate[d] to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action."<sup>32</sup>

<sup>27</sup> 40 C.F.R. §1508.8.

<sup>28</sup> 40 C.F.R. §1502.16.

<sup>29</sup> Council on Environmental Quality, Environmental Justice: Guidance Under the National Environmental Policy Act 15-16 (1997), available at <http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf> [hereinafter CEQ Guidance].

<sup>30</sup> *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

<sup>31</sup> See DEIS/R at S-1.

<sup>32</sup> *Berkeley Keep Jets Over Bay v. Port Commissioners* (2001) 91 Cal. App. 4th 1344, 1374 (quoting *Schoen v. Dept. of*

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### 3. Federal Section 4(f) and 6(f) Resources

The State Parks Comments document the potential impacts of high speed train on state parks throughout the state, and we incorporate those comments by reference here.

The parks that may be impacted by the project include, among others: Cardiff State Beach, Carlsbad State Beach, Castaic State Recreation Area, Colonel Allensworth State Historic Park, Cornfields State Park, Doheny State Beach, Fort Tejon State Historic Park, Henry W. Coe State Park, Hungry Valley State Vehicular Recreation Area, Leucada State Park, McConnell State Recreation Area, Moonlight State Beach, Old Town San Diego State Recreation Area, Pacheco State Park, San Clemente State Beach, San Elijo State Beach, San Luis Reservoir State Recreation Area, San Onofre State Beach, South Carlsbad State Beach, Torrey Pines State Beach, Torrey Pines State Reserve, and Taylor Yards State Park. However, the DEIS/R does not provide a comprehensive list of the impacted parks and as such fails to fully inform the public of the impacts the HST will have on national, state, and local parks throughout California.<sup>33</sup>

Yet, "[d]epending on the system of alignment options selected, the HST Alternative could result in impacts on 58 to 93 parkland resources."<sup>34</sup> In fact, the HST Alternative will "directly intersect with a portion or ... require the use of the property from that resource in total" of approximately 54-89 Section 4(f) resources.<sup>35</sup>

The extraordinary impact the HST Alternative would have on parks is directly at odds with Section 4(f) of Department of Transportation Act of 1966,<sup>36</sup> which states: "It is the policy of the United States Government that special effort be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."<sup>37</sup> Federal law provides that a "publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance" may only be used for a transportation program or project if, "(1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."<sup>38</sup> The DEIS/R fails to meet the requirements of Section 4(f). These issues are crucial to the process and should be addressed in the DEIS/R, not merely save for future analyses.

These effort fail to reflect the "special effort" or assessment of "prudent and feasible alternatives" that Section 4(f) requires. That language of Section 4(f) is a "specific and explicit bar ... only the most

*Forestry* (1997) 58 Cal. App. 4th 556, 573-574)

<sup>33</sup> The DEIS/R does not make clear precisely what the project's impacts would be, what mitigation is possible, and, most importantly, what alternatives exist to avoid altogether the taking of land from either of these parks. This problem is indicative of the draft's failure to appropriately consider the extent of many of the adverse impacts associated with the project – impacts that can and must be avoided.

<sup>34</sup> DEIS/R at 3/17-10

<sup>35</sup> DEIS/R at 3/16-6 (Table 3/16-2)

<sup>36</sup> 49 U.S.C. § 303

<sup>37</sup> 49 U.S.C. § 303(a); DEIS/R at 3.16-1

<sup>38</sup> 49 U.S.C. § 3030(c)(1)-(2); DEIS/R at 3.16-1

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unusual situations are exempted.<sup>39</sup> Section 4(f) makes clear that preservation of parkland is of paramount importance, more so than costs, directness of route, and community disruption.<sup>40</sup> The review that Section 4(f) requires must be conducted before an alignment that would impact Section 4(f) resources is chosen, and the DEIS/R must be revised and re-circulated to reflect this change.<sup>41</sup> By failing to address these impacts in the DEIS/R the Authority and the FRA have undermined informed decision-making and meaningful public comment.

Complementing Section 4(f), "Section 6(f) of the act prohibits the conversion to a non-recreational purpose of property acquired or developed with" grants obtained through the Land and Water Conservation Fund Act "without the approval of the U.S. Department of the Interior's ("DOI's") National Park Service. Section 6(f) directs DOI to ensure that replacement lands of equal value (monetary), location, and usefulness are provided as conditions to such conversions. Consequently, where such conversions of Section 6(f) lands are proposed for transportation projects, replacement lands must be provided."<sup>42</sup> The DEIS/R does little to address this requirement.

Given the extent of potential impacts, the analysis contains in the draft clearly fails to meet legal standards. Section 4(f) states: "The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the states, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities."<sup>43</sup>

Section 4(f) requires analysis of alternatives be conducted, and specific mitigation measures identified, before an alignment choice is made. This process must occur before the project is approved so that the public can meaningfully comment before these parks are slated for degradation or destruction.

### B. Federal and State Civil Rights and Environmental Justice Laws

#### 1. Federal Title VI and its Regulations

Title VI of the Civil Rights of 1964 and its implementing regulations prohibit both intentional discrimination based on race, color or national origin, and unjustified discriminatory impacts for which there are less discriminatory alternatives, by applicants for or recipients of federal funds including recipients of funds from the Department of Transportation. Title VI provides: "No person in the United States shall on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."<sup>44</sup>

The regulations that every federal agency has enacted pursuant to Title VI bar criteria or methods of

<sup>39</sup> *Citizens to Preserve Overton Park v. Volpe* (1971) 401 U.S. 402, 411.

<sup>40</sup> *Citizens to Preserve Overton Park v. Volpe* (1971) 401 U.S. 402, 412-13.

<sup>41</sup> Compare *Brooks v. Volpe* (W.D. Wash. 1971) 350 F. Supp. 269, 282, *aff'd* (9<sup>th</sup> Cir. 1973) 487 F.2d 1344 (Section 4(f) determination that relies on a deficient EIS is invalid).

<sup>42</sup> DEIS/R at 3.16-1.2 (citing 16 U.S.C. §§ 460-4-460-11); see DEIS/R at 3.16-1.2 (citing California Park Preservation Act of 1071, California Public Resources Code § 5400 *et seq.*) (similar).

<sup>43</sup> 49 U.S.C. § 303(b); DEIR at 3.16-1.

<sup>44</sup> 42 U.S.C. § 2000d (2004). The Equal Protection Clause of the Fourteenth Amendment to the United States Constitution also prohibits intentional discrimination. See also Section 1983 of the Civil Rights Act of 1871.

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administration by recipients of federal funds that have the effect of subjecting persons to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of a program with respect to individuals of a particular race, color, or national origin. An important purpose of the statutory schemes is to assure that recipients of public funds not maintain policies or practices that result in racial discrimination.

### 2. The President's Order on Environmental Justice

The President's Order on Environmental Justice requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."<sup>45</sup> "Each Federal agency shall conduct its programs, policies, and activities that substantially effect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin."<sup>46</sup> Each agency must gather, analyze, and publish information about the impact of its actions on diverse populations.<sup>47</sup> California Civil Rights and Environmental Justice Laws

California law also prohibits intentional discrimination and unjustified discriminatory impacts under Government Code section 11135.<sup>48</sup>

In addition, California law defines environmental justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."<sup>49</sup>

### 3. Discriminatory Actions

Proceeding with the HST under the current DEIS/R would violate both the disparate impact and intentional discrimination standards under federal and state laws.

#### a. Unjustified Discriminatory Impacts.

There are three prongs to the discriminatory impact: (1) whether an agency action has a disproportionate impact based on race, ethnicity, or national origin; (2) if so, whether the action is justified by business necessity; and (3) even if the action would otherwise be justified, the action is prohibited if there are less discriminatory alternatives to accomplish the same objective.<sup>50</sup>

<sup>45</sup> Executive Order 12,898 at § 1-101 (Feb. 11, 1994).

<sup>46</sup> *Id.* at § 2-2.

<sup>47</sup> *Id.* at § 3-3.

<sup>48</sup> See Cal Gov. Code § 11135 *et seq.*; 22 CCR § 9810.

<sup>49</sup> Cal. Gov. Code § 65040.12. The Governor's Office of Planning and Research is currently working on implementing this code section.

<sup>50</sup> *Larry P. v. Riles*, 793 F.2d 969, 983 (9<sup>th</sup> Cir. 1984).

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Applying the discriminatory impact standard here, (1) people of color and low income communities are disproportionately denied the benefits of parks and open space including the Cornfield and Taylor Yard, as demonstrated in the State Park Comments quoted above. (2) There is no business necessity to justify those disparities, and the DEIS/R present none. (3) There are less discriminatory alternatives, as discussed throughout our public comments.

### b. Intentional Discrimination

To evaluate an intentional discrimination claim, courts consider the following kinds of evidence: (1) the impact of the action, whether it bears more heavily on one racial or ethnic group than another; (2) any history of discrimination; (3) any departures from procedural norms; (4) any departures from substantive norms; (5) the decision maker's knowledge of the harm caused and would continue to cause; (6) a pattern or practice of discrimination.<sup>51</sup>

Applying the intentional discrimination analysis here: (1) The impact analysis is the same as above. (2) and (6) There is a history and pattern of discrimination by transportation authorities, particularly rail authorities, against communities of color and low-income communities in the heart of Los Angeles and throughout California, as discussed below. (3) and (4) The DEIS/R are replete with procedural and substantive irregularities, as demonstrated throughout the comments submitted by State Parks, Planning and Conservation League, Natural Resources Defense Council, and others. (5) Decision-makers know the impact their actions would have on communities of color and low income communities. We document those impacts here.

"[Our] intent here is not to paint a simplistic scene of victims and aggressors, with single proximate factors of cause and effect, but to recognize that the complexities and ambiguities of this nation's multicultural past and present and the ways in which American 'society' has used our impacted Earth cannot be separated from underlying values that allow racism and inequities in political and economic power."<sup>52</sup>

The fact that low-income people of color disproportionately live in areas without adequate access to parks and recreation is not an accident of unplanned growth, but rather the result of a continuing history and pattern of discriminatory transportation policies, discriminatory land use planning, restrictive housing covenants, federal mortgage subsidies restricted to racially homogenous neighborhoods, and discriminatory park funding policies and practices.<sup>53</sup>

<sup>51</sup> See *Village of Arlington Heights v. Metropolitan Housing Dev. Corp.*, 429 U.S. 252, 265 (1977); *United States Department of Justice, Civil Rights Division, Title VI Legal Manual (Sept. 1998)* at 49-53 and authorities cited.

<sup>52</sup> Alison H. Deming and Laurent E. Savoy, *The Colors of Nature: Culture, Identity, and the Natural World* 10 (2002) (hereafter *Colors of Nature*).

<sup>53</sup> The Federal Housing Administration Manual of 1938, for example, states: "If a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same racial classes. A change in social or racial occupancy generally contributes to instability and a decline in values." See also Mike Davis, *City of Quartz* 160-64 (1990); Mike Davis, "How Eden Lost Its Garden," chapter in *Ecology of Fear* (2000).

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### c. The Continuing History and Pattern of Discrimination by Transportation Authorities in the Cornfield and Taylor Yard Communities and Beyond

The continuing history and pattern of discrimination by transportation authorities against people of color in California, including the communities surrounding the Cornfield and Taylor Yard, has been extensively documented.

The Cornfield today lies across the street from New Chinatown and a stone's throw away from old Chinatown. Historically railroad authorities acting under color of law "discriminated against [the Chinese] in every way possible, and the state did all it could to degrade them and deny them a decent livelihood." Stephen E. Ambrose, *Nothing Like It in the World: The Men Who Built the Transcontinental Railroad 1863-1869* at 150 (2000). *Accord, id.* at 150-51, 153-54, 378; David Howard Bain, *Empire Express: Building the First Transcontinental Railroad 205-07* and authorities cited (2000); David Howard Bain, *The Old Iron Road* 200-02, 264-65, 356-57 (2004).

The locations of both Old and New Chinatown were determined by discriminatory policies and practices. By the end of the nineteenth century, the Chinese had been systematically squeezed into a small part of El Pueblo on the southwest side of the Plaza towards the Los Angeles River through discriminatory enforcement of health regulations, arson, violence, and the destruction of buildings as a result of racial discrimination and fears that Chinese would lower property values. In 1871, a mob that included police officers committed the random lynching murders of nineteen Chinese residents.<sup>54</sup> The Mayor of Los Angeles, a City Council member, the Chief of Police, and a railroad employee were implicated in the Chinatown Massacre that first brought Los Angeles to international attention. The Massacre started on Calle de los Negros—called "Nigger Alley" at the time—within walking distance of the Cornfield and the present Union Station.<sup>55</sup>

In the 1920s and 1930s, the three railroads—Union Pacific, Southern Pacific, and the Atchison, Topeka & Santa Fe—planned to construct a terminal downtown. Old Chinatown was destroyed and residents were relocated to the present site of New Chinatown to make room for Union Station. The City Municipal Housing Commission did not even approve a plan to relocate Chinatown until weeks after the demolition started. New Chinatown was built on vacant Southern Pacific railroad land west of the Cornfield. Today Union Station is listed in the National Register of Historic Places for its architectural, historical, and archeological values. An interpretive panel on a walking tour outside Union Station makes no mention of the destruction of the community in Old Chinatown.<sup>56</sup>

Today four freeways eviscerate the communities of color surrounding the Cornfield and nearby Taylor Yard. See Robert Garcia, *et al.*, *The Cornfield and the Flow of History: People, Place, and Culture* 5 (2004).<sup>57</sup>

<sup>54</sup> See Robert S. Greenwood, *Down by the Station: Los Angeles Chinatown, 1880-1933* at 10-12, 37-40 (1996); James P. Allen and Eugene Turner, *Changing Faces, Changing Places: Mapping Southern Californians* 37 (2002); Brian Niiya, ed., *ENCYCLOPEDIA OF JAPANESE AMERICAN HISTORY* (2001) at 111-12.

<sup>55</sup> Paul M. De Falla, *Lantern in the Western Sky*, *HISTORICAL SOCIETY OF SOUTHERN CALIFORNIA QUARTERLY* at 57 (1960).

<sup>56</sup> See generally Robert S. Greenwood, *Down by the Station: Los Angeles Chinatown, 1880-1933* at 10-12, 37-40 (1996).

<sup>57</sup> Available on the web at [www.cclipi.org](http://www.cclipi.org).

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In the 1950s, transportation authorities ran a freeway through beautiful Hollenbeck Park in disproportionately Latino East L.A.<sup>58</sup> Today the largest open space in East L.A. is Evergreen Cemetery.<sup>59</sup>

In the 1970s the Center for Law in the Public Interest filed a lawsuit on environmental quality and civil rights grounds against the Century Freeway in what is now recognized as one of the earliest environmental justice victories in the country. The litigation continued for over 30 years and resulted in massive programs including the creation of jobs, affordable housing, and public transit to distribute the benefits and burdens of the project more fairly.<sup>60</sup>

The Los Angeles County Metropolitan Transportation Authority settled the historic civil rights and environmental justice lawsuit filed by the NAACP Legal Defense & Education Fund, Inc., alleging that MTA operated separate and unequal bus and rail systems that discriminated against the working poor and low income communities of color by agreeing to invest what now amounts to over \$2 billion in the bus system. See Robert Garcia and Thomas A. Rubin, "Crossroad Blues: The MTA Consent Decree and Just Transportation," chapter in Karen Lucas, ed., *Running on Empty: Transport, Social Exclusion and Environmental Justice* (2004).

#### IV. Implementing the Vision and Values

##### A. Environmental Justice, the Cornfield, and Taylor Yard

The State Park Comments recognize that "[p]roposed alternative HST corridors impacting both the Taylor Yard and Cornfield properties clearly raise the environmental justice issue."<sup>61</sup>

The Center for Law in the Public Interest has long documented the environmental justice impacts of environmental degradation in the Cornfield and Taylor Yard communities. See Robert Garcia et al., *The Cornfield and the Flow of History: People, Place, and Culture* (2004);<sup>62</sup> Robert Garcia et al., *Dreams of Fields: Soccer, Community, and Equal Justice*, Center for Law in the Public Interest (2002).<sup>63</sup> Accord, *Cornfield State Park Advisory Committee, Recommendations Report: Vision, Themes, Community* (2003).<sup>64</sup>

The State Park Comments describe these environmental justice concerns in detail:

The Cornfield property was the site of a recent hard-fought community battle to stop industrial development and secure the site for badly needed public open space. Purchased by California State Parks for \$33 million, the site will be transformed from a

<sup>58</sup> See [www.usc.edu/neighborhoods/hsc/parks](http://www.usc.edu/neighborhoods/hsc/parks).

<sup>59</sup> See, e.g., Miguel Bustillo, *Former Foes Unite Behind a Proposal to Turn Old Reservoir Site into Park*, L.A. Times, Jan. 15, 2004.

<sup>60</sup> See, e.g., Bill Lann Lee, *Civil Rights and Legal Remedies: A Plan of Action*, chapter in Robert D. Bullard & Glenn S. Johnson, *Just Transportation* 156, 157 (1997); *Keith v. Volpe*, 858 F. 2d 467 (9<sup>th</sup> Cir. 1988), 506 F.2d 696 (9<sup>th</sup> Cir. 1974).

<sup>61</sup> State Park Comments at 32.

<sup>62</sup> Available on the web at [www.clipi.org](http://www.clipi.org).

<sup>63</sup> *Id.*

<sup>64</sup> Available on the web at <http://www.parks.ca.gov/pages/21491/files/RecommendationsReport.pdf>

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former rail yard and brownfield into a verdant park and gathering place to celebrate, examine, and experience over 10,000 years of history and culture of Los Angeles. It has long been considered one of the most important cultural sites in Los Angeles, as it is tied closely to the story of the area from the earliest human settlements. Indigenous Native American tribes lived in the area for as long as 9,000 years. The site includes portions of the village of Yangna, the site for Spanish colonization of the area with the establishment of El Pueblo de Los Angeles. Also found here are fragments of "Zanja Madre" (the original water system dating from 1789 that supplied water to Spanish settlement of El Pueblo de Los Angeles), and other archeological sites with significant subsurface historic structures. . . .<sup>65</sup>

If the HST alignment tunnels under the park entirely and emerges towards the downtown area in a way that conflicts with the view of downtown Los Angeles, the notion of Cornfield as a vantage point for a welcoming view of the city will be seriously compromised. Substantial mitigation would have to be established, perhaps involving far more tunneling than currently envisioned for this alignment. If the HST alignment involves emerging from the tunnel while on the Cornfield site, the open space and related recreation values of the property will be diminished along with the view. This alignment particularly threatens future uses including recreational open space and the proposed Los Angeles History Interpretive Center of Statewide significance. If the HST alignment involves an elevated line that crosses the river to the south of the Cornfield site, the view of downtown Los Angeles from the site could be compromised.<sup>66</sup>

Recreation at the Taylor Yard property could be compromised if the HST project follows an elevated rail line along the northeastern park boundary as proposed. That alternative may interfere (visually and through disturbances caused by additional passing trains) with the intent of the park plan to provide a natural setting for recreation as a respite from urbanization.<sup>67</sup>

The DEIS/R also fails to address the safety issue of the HST alternative traveling near or through a park. In addition to pollution, noise, and soccer balls rolling toward RR tracks, the risk of derailments must be considered.

##### B. Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

The DEIS/R fails to adequately address environmental justice impacts. A revised DEIS/R must fully address these potential impacts in compliance with Order DOT 5610.2 and other applicable guidelines. The discussion of these impacts is largely and inappropriately deferred until project-level review occurs. This approach renders it impossible to redirect alignments or stations based on environmental justice impacts because it will be too late.

<sup>65</sup> State Park Comments at 31.

<sup>66</sup> *Id.*

<sup>67</sup> *Id.* at 30.

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## Comment Letter O052 Continued

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
 Re: *California High Speed Train Draft EIR/EIS and Impact on the Cornfield and Taylor Yard*  
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The DEIS/R addresses the impacts on land uses. "The potential compatibility of the alternatives with existing land use is evaluated based on the potential sensitivity of various land uses to the changes which would be included with the Modal and HST Alternatives, and the potential impact of these changes on existing and planned land uses."<sup>68</sup> Under this means of evaluation, alignment choices with in the existing right of way are always considered low impacts.<sup>69</sup> This appears to underestimate the actual impacts of the project. HST alignments that travel within existing rights of way may still pose new, or magnify existing, negative impacts on surrounding communities and resources. These potentially significant impacts are inadequately addressed in the DEIS/R.

The study area for land use compatibility is .25 miles on either side from the centerline of the rail, stations, and other potential HST related facilities.<sup>70</sup> For property impacts, the study area is 100 feet on either side of the centerline.<sup>71</sup> Realistically speaking, a property that is 150 feet or 200 feet from a train speeding by at 200 miles per hour ("mph") eight times a day will be significantly impacted by those occurrences. Both of these study areas need to be expanded to adequately assess potential impacts.

The DEIS/R also addresses the impacts on environmental justice communities. The study area for environmental justice communities is .25 miles on either side from the centerline of the rail, stations, and other potential HST related facilities.<sup>72</sup> This study area also needs to be expanded to adequately assess the impacts from the HST. A more appropriate area for assessing such impacts would be the same area used to identify a community as an environmental justice community. Expanding the study area in this manner would provide a more accurate review of the communities impacted by the project.

Even within this limited study area, the discussion of environmental justice impacts in the DEIS/R does not comply with existing laws and regulations. For example:

Planning and programming activities that shall have the potential to have a disproportionately high and adverse effect on human health or the environment shall include explicit consideration of the effects on minority populations and low-income populations. Procedures shall be established or expanded, as necessary, to provide *meaningful opportunities for public involvement by members of minority populations* and low-income populations during the planning and development of programs, policies and activities.<sup>73</sup>

In spite of this specific guidance, there is little analysis of environmental justice concerns, or specific discussion of efforts to "provide meaningful opportunities for public involvement by members of minority populations and low-income populations." This is troubling considering many of the proposed HST station stops are located "within a minority population." A supplement to the DEIS/R

<sup>68</sup> DEIS/R at 3.7-2.

<sup>69</sup> See DEIS/R at 3.7-4 (Table 3.7-2).

<sup>70</sup> DEIS/R at 3.7-5.

<sup>71</sup> DEIS/R at 3.7-5.

<sup>72</sup> DEIS/R at 3.7-5.

<sup>73</sup> U.S. Department of Transportation, *Environmental Justice in Minority Populations and Low-Income Populations*, Order DOT 5610.2 (emphasis added).

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should engage communities around potential HST alignment and station stops to more fully assess and address environmental justice concerns.

The DEIS/R fails to discuss any measures to mitigate the impacts HST will have on land use or environmental justice communities. Instead the draft saves for the project level analyses discussion of consistency with existing and planned land use, neighborhood access needs, multi-modal connectivity opportunities, and outreach to potential environmental justice communities.<sup>74</sup> For the Authority and the FRA to present an adequate and accurate analysis of the impacts that the HST will impose, and measures that will mitigate that impact, these issues need to be explored in the DEIS/R.

### C. Recreation and Human Health

The proposed project has the potential to cause physical changes in the state's recreation environment. The HST also raises serious create safety concerns for children, families, and individuals who participate in recreational activities. The impact on the environment for recreation is not discussed or analyzed in a single location. Disparate parts of the DEIS/R discussing recreation should appear in a separate recreation chapter. The loss of or significant impact to recreation should be considered a socio-economic effect. The DEIS/R should analyze socioeconomic and environmental justice impacts and propose mitigation for the effect that the loss of recreation will have on local economies.<sup>75</sup>

#### 1. Recreation

As the State Park Comments emphasize:

The importance of recreation in modern society cannot be overestimated. The opportunity to alter the pace of modern life and experience historic and natural settings or more actively participate in outdoor activities has been shown to improve societal well-being by maintaining the physical and emotional health and wellness of individuals and contributes to reduction in crime. Recreational activities on State, local, and regional parklands, open space, and trails provide strong support for community values and serves as a mechanism and social bridge for integrating people of all races, ages, incomes, and abilities. These lands educate, challenge, inspire, and entertain our children, offer safe and secure places for families and seniors, protect and conserve our natural and cultural resources. They also help to strengthen and stimulate California's economy through recreation-related sales of clothing, equipment, fees and services and the revenues generated from the tourism and hospitality industries. As California's population is expected to grow by nearly 30% in the next quarter century, the demand for recreational resources and open space to support this population demand as well as increased efforts to protect existing lands dedicated to this recreation purpose.<sup>76</sup>

<sup>74</sup> DEIS/R at 3.7-26, 27.

<sup>75</sup> Cf. State Park Comments at 9-11.

<sup>76</sup> *Id.* at 11. See generally Robert Garcia et al., *Dreams of Fields: Soccer, Community, and Equal Justice*, Center for Law in the Public Interest (2002) ([www.clipi.org](http://www.clipi.org)).

O052-1  
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**Comment Letter O052 Continued**

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**2. Health and Recreation**

The human health implications of the need for active recreation in the Cornfield and Taylor Yard are profound. See generally Robert Garcia *et al.*, "Healthy Children, Healthy Communities: Schools, Parks, Recreation, and Sustainable Regional Planning," *Fordham Urban Law Journal Symposium on Urban Equity* (forthcoming fall 2004).

If current trends in obesity, inactivity, and disease continue, today's youth will be the first generation in this nation's history to face a shorter life expectancy than their parents.<sup>77</sup> Adult onset diabetes now increasingly strikes children at younger and younger ages. As a result, children are more likely to suffer long range effects including death, loss of limbs, and blindness. This health crisis currently costs the U.S. over \$100 billion and 400,000 deaths each year.

In California, 27% of children are overweight and 40% are unfit.<sup>78</sup> Only 24% of the state's fifth-seventh- and ninth-graders met minimal physical fitness standards last year.<sup>79</sup> The numbers are even lower within LAUSD, where just 17% of fifth-graders, 16% of seventh-graders, and less than 11% of ninth-graders met all six of the minimum fitness standards in the 2002-2003 school year.<sup>80</sup> Over 91% of the students in LAUSD are students of color. The assembly districts with the highest proportion of overweight children in California also have the highest concentration of people of color.<sup>81</sup>

There is not adequate open space for recreation in Southern California, particularly for inner city residents.<sup>82</sup> All communities suffer from obesity and inactivity, but communities of color and low income communities suffer first and worst. Communities of color and low-income communities are disproportionately denied the benefits of safe open spaces for recreation, and disproportionately suffer from diseases related to obesity and inactivity.

<sup>77</sup> Eloisa Gonzalez, MD, MPH, (Jan. 21, 2004), L.A. County Dept of Public Health, *Los Angeles Unified School District (LAUSD) Citizens' School Bond Oversight Committee*; see also Jennifer Radcliffe, *Going to War against Epidemic of Childhood Obesity*, Daily News, Jan. 27, 2004, at 1.

<sup>78</sup> Press Release, CA Dept. of Educ., *State Schools Chief O'Connell Announces California Kids' 2002 Physical Fitness Results*, (Jan. 28, 2003) [hereinafter *California Kids*]. In California, all students in grades 5, 7, and 9 are required to take the California Fitness Test in order to assess physical fitness in six health fitness areas: aerobic capacity, body composition, abdominal strength, trunk extension strength, upper body strength and flexibility. *Id.* Students must meet all six standards in order to be considered fit. *Id.*

<sup>79</sup> *Id.*

<sup>80</sup> Cara Mia DiMassa, *Campus Crowding Can Make P.E. a Challenge*, L.A. Times, Nov. 19, 2003, Metro Part B, at 2.

<sup>81</sup> California Center for Public Health Advocacy, *An Epidemic: Overweight and Unfit Children in California Assembly Districts*, 5 (Dec. 2002) [hereinafter "*An Epidemic*"], available at <http://www.gisplanning.net/publichealth/help.asp>.

<sup>82</sup> See Richard J. Jackson, MD, MPH and Chris Koehntzky, MSP, *Sprawl Watch Clearinghouse Monograph Series, Public Health/Land Use Monograph, Creating a Healthy Environment: The Impact of the Built Environment on Public Health* [hereinafter *Jackson*], available at <http://www.sprawlwatch.org/health.pdf>.

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**OVERWEIGHT AND UNFIT CHILDREN IN CALIFORNIA<sup>83</sup>**

RACE/ETHNICITY	OVERWEIGHT	UNFIT
Latino	34%	45%
African American	29%	46%
White	20%	34%
Asian	18%	36%

**DIABETES IN CALIFORNIA<sup>84</sup>**

RACE/ETHNICITY	AGE 18+	AGE 50-64
African American	10%	21%
American Indian and Alaskan Native	9%	20%
Latino	6%	18%
White	6%	8%
Asian and Native Hawaiian and Other Pacific Islanders	5%	11%

The benefits of open space extend beyond physical health. Research links open green spaces to improved mental health. For example, symptoms of children with attention deficit disorder ("ADD") are relieved by contact with nature.<sup>85</sup> Views of nature benefit the mental health of children without ADD as well. African-American children in low-income inner city environments, and non-Hispanic white children from high income families, concentrate better with views of open space.<sup>86</sup> Girls score higher on self discipline tests when taken with a natural view.<sup>87</sup>

The state of California currently does not adequately enforce its physical education requirements.<sup>88</sup> Physical education classes have so many students that teachers cannot give students the individual attention they need.<sup>89</sup> The average student-teacher ratio is 43-1, far exceeding the national recommendation of 25-1.<sup>90</sup> In LAUSD, middle school physical education classes average 55 to 65 students per class, with some gym classes exceeding 70 students per teacher.<sup>91</sup> As a result, students in physical education sessions may spend more time standing on the sidelines waiting their turn, rather

<sup>83</sup> Source: California Center for Public Health Advocacy, *An Epidemic: Overweight and Unfit Children in California Assembly Districts* (Dec. 2002).

<sup>84</sup> Source: UCLA Center for Health and Policy Research, *Diabetes in California: Findings from the 2001 Health Interview Survey*.

<sup>85</sup> A. Faber Taylor, *et al.* "Coping with ADD: The surprising connection to green play settings," *Environment & Behavior* 33, 54-77 (2001).

<sup>86</sup> *Id.* See also A. Faber Taylor, *et al.*, "Views of Nature and Self-Discipline: Evidence from Inner City Children," *Journal of Environmental Psychology* (2001).

<sup>87</sup> *Id.*

<sup>88</sup> Vicki Kemper, *New Priorities Leave PE, Obese Children Behind*, L.A. Times, Sept. 15, 2003, quoting Dianne Wilson-Graham, director of physical education in California.

<sup>89</sup> U.S. Dept. of Health and Human Services and U.S. Dept. of Education, *Promoting Better Health for Young People Through Physical Activity and Sports*, 11 (Fall 2001) [hereinafter "*Promoting Better Health for Young People*"], available at [http://www.cdc.gov/ncepdhp/dash/physicalactivity/promoting\\_health/index.htm](http://www.cdc.gov/ncepdhp/dash/physicalactivity/promoting_health/index.htm).

<sup>90</sup> Cara Mia DiMassa, *Campus Crowding Can Make PE a Challenge*, L.A. Times, Nov. 19, 2003, at B2.

<sup>91</sup> *Id.*

O052-1  
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## Comment Letter O052 Continued

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than actually participating in activity.<sup>92</sup>

Regular physical activity is associated with enhanced health and reduced risk for all-cause mortality, heart disease, diabetes, hypertension, and cancer.<sup>93</sup> Physical activity for children and adolescents helps to build and maintain healthy bones, muscles, and joints; prevent or delay the development of high blood pressure; and reduce feelings of depression and anxiety.<sup>94</sup> People who are inactive are twice as likely to experience symptoms of depression as are more active people.<sup>95</sup> Depression can lead to suicide, the ninth-leading cause of death in America. Physical activity relieves symptoms of depression and anxiety and improves mood by providing opportunities for social interaction, increased feelings of self-mastery and self-efficacy, and relief from daily stress.

Programs in the Cornfield and Taylor Yard can make a difference in students' lives and health. Physically fit students perform better academically.<sup>96</sup> Recreation programs can build character, pride, self esteem, teamwork, leadership, concentration, dedication, fair play, mutual respect, social skills, and healthier bodies for children.<sup>97</sup> Recreation programs can help keep children in school; develop academic skills to do better in school and in life; and increase access to higher education.<sup>98</sup> Male athletes are four times more likely to be admitted to Ivy League colleges than are other males; for female recruits, the advantage is even greater.<sup>99</sup>

Recreation programs provide alternatives to gangs, drugs, violence, crime, and teen sex. A national survey of more than 14,000 teenagers found that those who took part in team sports were less likely to have unhealthy eating habits, smoke, have premarital sex, use drugs, or carry weapons.<sup>100</sup> The Los Angeles County District Attorney concluded that among the reasons young people join gangs is "[the exclusion] by distance and discrimination from adult-supervised park programs."<sup>101</sup> The study recommends that "alternative activities like recreation" should be part of every gang prevention strategy.<sup>102</sup>

<sup>92</sup> Prevention Institute, *Strategies for Action: Integrating Nutrition and Physical Activity Promotion to Reach Low-Income Californians* 11 (October 2001), available at <http://www.preventioninstitute.org/nutrapp.html>.

<sup>93</sup> U.S. Dept. of Health and Human Services, *Physical Activity and Health: A Report of the Surgeon General*, 236 at 7, 85-87, 90-91, 102-03, 110-12, 127-30, 135 (1997) [hereinafter "Surgeon General"], available at <http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf>.

<sup>94</sup> *Promoting Better Health for Young People*, supra, at 7.

<sup>95</sup> *Surgeon General*, supra, at 135-36, 141.

<sup>96</sup> Press Release, CA Dep't of Educ., *State Study Proves Physically Fit Kids Perform Better Academically*, (Dec. 10, 2002), available at <http://www.cde.ca.gov/news/releases2002/rel37.asp>.

<sup>97</sup> See Anastasia Loukaitou-Sederis & Orit Stieglitz, *Children in Los Angeles Parks: A Study of Equity, Quality, and Children Satisfaction with Neighborhood Parks*, Town Planning Review 1-6 (2002).

<sup>98</sup> *Id.*

<sup>99</sup> See William G. Bowen et al., *Reclaiming the Game: College Sports and Educational Values* (2003).

<sup>100</sup> Russell R. Pate et al., *Sports Participation and Health-Related Behaviors Among US Youth*, Archives of Pediatrics and Adolescent Medicine (Sept. 2000).

<sup>101</sup> L.A. District Att'y, *Gangs, Crime and Violence in Los Angeles: Findings and Proposals from the District Attorney's Office* (1992).

<sup>102</sup> *Id.*

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### 3. Economic Costs of Obesity and Inactivity

The Surgeon General estimates the national cost of overweight and obesity in the year 2000 to have been \$117 billion, with \$61 billion in direct costs (including preventive, diagnostic, and treatment services related to overweight and obesity) and \$56 billion in indirect costs (the value of wages lost by people unable to work because of illness or disability, as well as the value of future earnings lost by premature death).<sup>103</sup>

The DEIS/R must analyze the impact of various alternatives on human health and recreation in fitness and economic terms.

### D. Cultural and Heritage Resources

The California Department of Parks and Recreation has published a study emphasizing the public's need to become more aware of California's cultural diversity and its tangible manifestations on our land. *Five Views: An Ethnic Sites Survey for California* (1982) can serve as a guide for addressing the impacts of the HST on the cultural and heritage resources in state parks like the Cornfield and Taylor Yard.<sup>104</sup>

From the time of the Tongvas, who built the village of Yangna near the Cornfield, the Cornfield and its surroundings have been a place imbued with the diverse history of Los Angeles.<sup>105</sup> The Tongva Indians settled the area near the Cornfield and Taylor Yard before the arrival of the Spaniards. According to Chief Anthony Morales and tribe member Mark Acuna, Tongva families played "shinny," a game similar to soccer, and enjoyed other field sports along the river. Chief Morales and Mr. Acuna support the importance of positive active recreation for children along the Los Angeles River today.

"California's native games and toys are a reflection of the natural history of the state—its mountains, rivers, deserts, wetlands, woodlands, and seashore—and California's first people."<sup>106</sup> Native Californians had a "passion for football-type games."<sup>107</sup> They "drove, tossed, or batted balls of mountain mahogany, braided buckskin, or polished stone, stuffed deerhide or seasoned laurel knots."<sup>108</sup> In most shinny- and soccer-like games, teams tried to score by getting the ball past the other team and through goal posts, or through a hole.<sup>109</sup> Soccer-like games involving balls and goal posts were river games—games played along river beds throughout California.<sup>109</sup>

The vision for the planned state park in the Cornfield is based, in large part, on the essential themes of

<sup>103</sup> U.S. Dept. of Health and Human Services, *The Surgeon General's Call to Action To Prevent and Decrease Overweight and Obesity* 9-10 (2001) [hereinafter "Call to Action"], available at <http://www.surgeongeneral.gov/topics/obesity/calltoaction/CalltoAction.pdf>.

<sup>104</sup> *Five Views* is available online at [http://www.cr.nps.gov/history/online\\_books/5views/5views.htm](http://www.cr.nps.gov/history/online_books/5views/5views.htm).

<sup>105</sup> Robert Garcia et al., *The Cornfield and the Flow of History: People, Place, and Culture*, Center for Law in the Public Interest 2 (2004) (available at [www.clipi.org](http://www.clipi.org)).

<sup>106</sup> Jeannine Gendar, *Grass Games & Moon Races: California Indian Games and Toys* 15 (1995).

<sup>107</sup> *Id.* at 17.

<sup>108</sup> *Id.* at 23.

<sup>109</sup> See *id.* at 20, 23, 25.

O052-1  
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**Comment Letter O052 Continued**

Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
 Re: *California High Speed Train Draft EIR/EIS and Impact on the Cornfield and Taylor Yard*  
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culture and history. According to the Cornfield State Parks Advisory Committee:

The Cornfield site is a conduit to understanding the story of Los Angeles from its earliest beginnings. The local resources past, present, and future reveal cultural, economic, and historical narratives of a broader, region-wide scope reflective of the city at large through time. The location of the site at the city's heart along with the centrality of these resources present a unique opportunity in Los Angeles to forge a connection of people, history, and place by opening a window to understanding the past and tracing the present into the future.

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The site should embrace the spirit and hopes of the multi-ethnic communities whose histories and struggles are interwoven with the Cornfield. People have lived and worked in this vicinity for many generations.

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Flowing through the site, the zanja system for water distribution was an open (diversion) ditch. The zanja system was developed soon after the founding of the pueblo in September 1781 and served Los Angeles as the primary source of domestic and irrigation water until 1904.

*Cornfield State Park Advisory Committee, Recommendations Report: Vision, Themes, Community 9-12 (2003).*<sup>110</sup>

The rich cultural and heritage resources of the Cornfield and Taylor Yard are jeopardized by the HST as presented in the DEIS/R. The DEIS/R must analyze the impact of various alternatives on cultural and heritage resources like those related to the Cornfield and Taylor Yard.

**E. Economic Benefits, Small Business Opportunities, and Jobs**

Communities surrounding the Cornfield and Taylor Yard are disproportionately poor and lack access to quality jobs, small business opportunities, and other economic benefits of public work projects like HST. The DEIS/R must thoroughly address how the Authority will ensure the fair distribution of the economic benefits generated by high speed rail.

LAUSD is currently investing over \$15 billion to build new schools and modernize existing schools, one of the largest public work projects in the nation. LAUSD has published reports on the policies and practices it has implemented to create a level playing field for small businesses and to provide job training and employment opportunities for local workers.<sup>111</sup> The Authority should study this best practice example and others and implement similar policies to fairly distribute the economic benefits

<sup>110</sup> Available on the web at <http://www.parks.ca.gov/pages/21491/files/RecommendationsReport.pdf>  
<sup>111</sup> See, e.g., LAUSD Press Advisory, Los Angeles Unified School District Announces the "We Build" Program, July 13, 2004.

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of high speed rail.

Contracting practices can result in unequal access to jobs. Large contracts can make it difficult for small-scale contractors to compete. Small businesses are excluded through complicated bidding procedures and large-scale projects that could be broken down into efficient smaller projects. Service contracts can be targeted for minority and women-owned small businesses. Access to job training and employment can provide an opportunity for access to the economic benefits of high speed rail. Job training programs can help low-income residents fulfill the demand for skilled labor. Different ways of packaging work could realize administrative savings while improving opportunities for minority and women-owned businesses and a diverse labor pool.<sup>112</sup>

**F. Cumulative Impacts**

NEPA and CEQA require public agencies to consider potential cumulative impacts.<sup>113</sup> This cumulative impacts analysis must consider past, present, and probable future transportation projects in the region or elsewhere in the western United States. Inconsistent with these requirements, the DEIR/S discussion of cumulative impacts is limited to present and future projects within areas that the HST would traverse.<sup>114</sup> This list leaves out key transportation projects such as the proposed expansion of Los Angeles International Airport ("LAX"). Failure to include such an important project undermines both the analysis and the credibility of the draft as a whole. The cumulative impacts analysis is unlawfully narrow in scope and limited in its discussion.

The DEIR/S fails to adequately specify mitigation measures for cumulative impacts. This failure is inconsistent with CEQA and NEPA. The Authority and FRA must prepare a specific and enforceable discussion of mitigation measures in a supplemental DEIR/S that is noticed and circulated for meaningful public comment.

**V. Request for Notification**

Pursuant to California Public Resources Code Section 21092(b)(3), we request that the Authority mail any and all public notices or information concerning the DEIS/R to:

Robert Garcia  
 Executive Director  
 Center for Law in the Public Interest  
 3250 Ocean Park Boulevard, Suite 300  
 Santa Monica, California 90405

**VI. Conclusion**

Four of the central lessons of the environmental justice movement are that communities of color and low income communities disproportionately suffer from environmental degradation, are denied the

<sup>112</sup> *Id.* at 243-47, 251-53.  
<sup>113</sup> 40 C.F.R. § 1508.7; 14 Cal. Code Regs. §§ 15216, 15130  
<sup>114</sup> DEIR/S at Appendix 3.17-A

O052-1  
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**Comment Letter O052 Continued**

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Chairman Petrillo, Mr. Mehdi, Mr. Rutter, and Members of the High Speed Rail Authority  
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benefits of public benefits including parks, lack the information necessary to understand the impact of environmental policies on all communities, and are denied full and fair public participation in the decision making process.

The serious inadequacies of the DEIS/R are symptomatic of fundamental deficiencies in the project itself. The Authority may not approve the project unless the DEIS/R is revised and recirculated to fully disclose and analyze the project's impacts and a proper range of alternatives. Given the multiple inadequacies discussed above, this DEIS/R cannot properly form the basis of a final EIS/R. The document is so fundamentally inadequate that meaningful public review and comment are precluded.<sup>115</sup>

O052-1  
cont.

We recommend that the High Speed Authority meaningfully address our environmental and social justice concerns through a new DEIS/R.

Respectfully submitted,

CENTER FOR LAW IN THE PUBLIC INTEREST

Robert Garcia, Executive Director  
Erica S. Flores, Assistant Director

August 31, 2004

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<sup>115</sup> See CEQA Guidelines § 15088.5.

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**Response to Comments of Robert Garcia and Erica S. Flores, Center for Law in the Public Interest, August 31, 2004 (Letter O052)**

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**O052-1**

Section I Overview: The Cornfield and Taylor Yard Properties are included and addressed in the Final Program EIR/EIS and will be subject to a full 4(f) analysis in future project-level environmental review. Subsequent project level analysis will allow for further avoidance and minimization efforts, as well as identification of specific mitigation, if impacts cannot be avoided. The Authority has identified the MTA/Metrolink, which avoids Cornfield property, as the preferred option. Between Burbank and Los Angeles Union Station, the MTA/Metrolink refers to a relatively wide corridor within which alignment variations will be studied at the project level. This option was chosen, in part, because it would have fewer potential affects on both the Cornfield Property and the Taylor Yards. Please also see standard response 6.24.2.

Section III The Legal Standards, 3. Federal Section 4(f) and 6(f) Resources: It is acknowledged that between 58 and 93 parkland resources could potentially be affected by the HST system. However, given the conceptual level of engineering performed for this programmatic environmental document it is premature and would be highly speculative to attempt to estimate specific physical impacts specific rail alignments to 4(f) and 6(f) resources. The more detailed engineering associated with the project level environmental analysis will allow further investigation of ways to avoid, minimize and mitigate potential use of 4(f) and 6(f) resources.

Section IV. Implementing the Vision and Values. C. Recreation and Human Health: Because recreational facilities (parks and designated recreational areas) are covered under Section 4(f) and 6(f), a separate section will not be created.

Section IV. Implementing the Vision and Values. F Cumulative Impacts. The expansion and redesign of the LAX terminal is a major project in southern California, however the addition of a runway at LAX is not a part of the current recommended alternative (Alternative D: Enhanced Safety and Security Alternative) in the LAX Master Plan Update.

Section V. Request for Notification: the Center for Law in the Public Interest will be added to the distribution list for the DEIS/EIR. All notices and information will be sent to:

Robert Garcia  
Executive Director  
Center for Law in the Public Interest  
3250 Ocean Park Boulevard, Suite 300  
Santa Monica, California 90405

Please also see response to Comment O051-1 and standard response 6.24.2. Please also see standard response 3.15.13 in regards to use of this program level document and level of detail. See O051-13 regarding recirculation of the Draft EIR/EIS.

Comment Letter O053

AUG-31-2004 04:33 FROM: COMMITTEE FOR GREEN 650-968-8431 TO: 19163220827 P. 2 O053



August 31, 2004

California High-Speed Rail Authority
Draft Program EIR/EIS Comments
925 L Street, Suite 1425
Sacramento, CA 95814
Fax: (916) 322-0827

Re: Comments submitted on the CAHSR Draft Environmental Impact Report/Environmental Impact Statement

Dear Board of Directors;

The Committee for Green Foothills submits this comment letter to request that the Authority reverse its prior decision and consider the Altamont Pass route alternative in a revised DEIR/DEIS ("DEIR").

For all the reasons discussed in the comment letter from the Loma Prieta Chapter of the Sierra Club, the Altamont route alternative is a feasible alternative alignment for the rail line.

The Committee for Green Foothills does not endorse any particular alignment for the rail line. We only seek adequate environmental planning that allows the best possible choice.

In addition to the failure to include Altamont, the DEIR has a number of flaws discussed in the Loma Prieta Chapter comment letter and in other comment letters.

For the reasons discussed above, we request that the Authority reissue a revised DEIR before proceeding to a decision on high speed rail.

Sincerely,

[Handwritten signature of Brian A. Schmidt]

Brian A. Schmidt
Legislative Advocate, Santa Clara County

O053-1

COMMITTEE FOR GREEN FOOTHILLS
3921 E. Bayshore Road
Palo Alto, CA 94303
650.968.7243 phone
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info@GreenFoothills.org
www.GreenFoothills.org



U.S. Department of Transportation
Federal Railroad Administration

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**Response to Comments of Brian A. Schmidt, Committee for Green Foothills, August 31, 2004  
(Letter O053)**

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**O053-1**

See Standard Response 2.18.1.



Comment Letter O054

AUG-31-2004 21:39 FROM:MICHAEL BECK EHL

(619) 588-1595

TO:19163220827

F.2

AUG-31-2004 21:39 FROM:MICHAEL BECK EHL

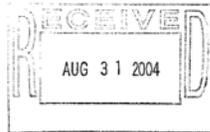
(619) 588-1595

TO:19163220827

P.3

O054

ENDANGERED HABITATS LEAGUE
DEDICATED TO ECOSYSTEM PROTECTION AND SUSTAINABLE LAND USE



August 30, 2004

Chairman Joe Petrillo, and
Committee members of the California High Speed Rail Authority
925 L St., Suite 1425
Sacramento, CA 95814

Regarding: California High Speed Rail Draft EIR/EIS

Dear Mr. Petrillo and Committee Members:

The Endangered Habitats League is a regional conservation organization dedicated to ecosystem protection, sustainable land use, and collaborative conflict resolution. We engage on state and federal level policies and projects that affect our core mission. As such, we appreciate the opportunity to comment on the Draft EIR/EIS for the proposed High Speed Rail project.

An effective high speed rail system holds the potential to significantly benefit the citizens of the state through the development of a visionary transportation alternative. Such a project could leverage important and sustainable compact development, reduce sprawl, and actually result in a net benefit to a range of environmental issues, including water and air quality and biology. These are feasible, attainable goals. It is essential however that the project clearly and unequivocally demonstrates a commitment to such goals, and that the baseline CEQA/NEPA analysis adequately establishes the basis for the development and implementation of a system that will produce those outcomes. Unfortunately, we find the DEIR/EIS inadequate in driving a fundamentally sound and legally defensible project. Specifically we would like to highlight the inadequate impact analysis on the following topics:

- Project description
Biology and hydrology including impact analysis
Land use and transportation planning

Project Description

There is a clear discrepancy between the project and alternatives description that the public must construe from the DEIR/EIS and the decision options that the Authority has

regarding alignment, mitigation, and mode. The document does not provide clear and complete project alternative descriptions (including mode, alignment, impacts, mitigation etc.) in a manner that is accessible and understandable to the public, nor does it provide a description of potential impacts or anticipated subsequent projects as required by CEQA (Article 2, Section 21157).

In contrast, the Authority may actually select modes, alignments, and mitigation strategies based entirely upon the information provided in this program level document. Furthermore, CEQA allows limited review of subsequent projects described in the master document. (Section 21157.1). If this document is certified and subsequent projects approved with the limited review provisions of CEQA, the Public Trust safeguards and intent of CEQA will have been circumvented. In particular, the issue of corridor alignment is highly egregious as it drives so much in the way of impact analysis and mitigation. In order to rectify this situation, we recommend that a revised DEIR/EIS be developed which includes adequate information, compiled in a logical and accessible manner.

Biology, Hydrology, and Impact Analysis

A cascade of inadequate conclusions related to biological and hydrological impacts and mitigation flow from the lack of an appropriate project description.

The biologic and hydrologic resources that will be impacted by the project are components of natural systems. Wildlife movement, discrete populations of plants and animals, and the hydrologic underpinnings of those resources within these systems will be impacted directly and indirectly by the project. Because system thresholds can be eroded over time by projects such as the HSP, cumulative impacts must be seriously considered as they insidiously build to significant, sometimes "system breaking" levels. The document does not provide adequate baseline information regarding species, habitats or the interrelation between them at an ecosystem level. Without this fundamental perspective, it is not possible to adequately assess and mitigate impacts, which in turn should drive alternatives analysis considerations.

Not only is it not possible to determine the impact level of significance based upon the information provided, but mitigation is generalized into a notion referred to as "mitigation strategies". CEQA does not provide for such a vague, non-specific action. A "strategy" is only as good as the criteria and binding performance standards linked to it.

In San Diego, our organization has been engaged in the Regional Transportation Plan (RTP) for a number of years. Funding to implement this 40-year, \$14 billion plan will be before the voters in November of this year. Among the projects to be funded (there are no "green field" projects in the Expenditure Plan) are three highway expansions in resource sensitive areas. A program level EIR, which will be utilized by subsequent more specific CEQA documents for project implementation, supports the RTP.

In order to address the potential significant impacts to the biological resources along these corridors, the transportation agency board (San Diego Association of

O054-1 cont.

O054-2

O054-1



U.S. Department of Transportation
Federal Railroad Administration

Comment Letter 0054 Continued

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AUG-31-2004 21:40 FROM:MICHAEL BECK EHL (619) 588-1595 TO:19163220827 P.5

Governments) adopted a "net biological benefit" standard as a legally binding performance outcome for these projects. Based upon this ordinance obligation, plant and animal populations and wildlife movement will be improved beyond pre-project conditions. Capital project design and route alignment alternatives will be utilized to minimize impacts and help reach this outcome. This commitment drives an "avoid first" approach (a CEQA objective), in contrast to the "impact and mitigate", which would seem to be the logical outcome of the CEQA process as outlined in the DEIR/EIS. We strongly recommend that the Authority adopt such a standard for impacts resulting from the HSR project. Following for your information is the TransNet Extension Ordinance and Expenditure Plan for those projects.

Environmental Enhancement Criteria Mitigating Highway 67, 76, and 94 Expansion Impacts

Segments of Highways SR 67, SR 76 and SR 94 are proposed for expansion from two to four lanes through funding identified in the TransNet Expenditure Plan. The proposed expansions will have substantial direct and indirect impacts to plant and animal species and to the regional wildlife movement corridors bisected by the roads. These corridors are essential "infrastructure" for our region's nationally recognized habitat preservation plans.

Very high levels of road kill are a significant existing condition on all of these highway segments, which could be exacerbated by the increased traffic along the expanded highways should they be widened. Direct and indirect impacts to sensitive plant and animal populations, and to the function of the wildlife corridors, should be mitigated in order to produce an on-site "net benefit" to species and to the movement of wildlife along these wildlife corridors.

In order to accomplish this objective, it is necessary that the adopted TransNet Expenditure Plan include policy language and directives that insures the "net benefit" mitigation standard is met. This will require a comprehensive baseline analysis of existing and future conditions, adoption of measures to mitigate direct and indirect impacts to species, adoption of measures to accommodate species-specific wildlife movement through the corridors, and implementation of capital project designs that can reduce impacts.

Biological analysis and recommendations need to be consistent with Multiple Species Conservation Program (MSCP) and Multiple Habitat Conservation Program (MHCP) goals and objectives, data, and protocols. Analysis will commence at the time of, or prior to, TransNet Funding availability.

- Key road segments:
• SR67, Mapleview to Dye Road
• SR76, Melrose to I-15
• SR94, Jamacha Road to Steele Canyon Road

Additionally, the DEIR/EIS fails to adequately discuss potential impacts of the project on the NCCP program in the south-coast plan areas. In fact, the document incorrectly states that there are no NCCP's along the LA-Orange County-San Diego corridor. This is inaccurate; in fact there are three subregional NCCP's in Orange and San Diego County along the coastal route (Southern Orange County NCCP, Multiple Habitat Conservation Plan in north-coastal San Diego County and Multiple Species Conservation Program in south-coastal San Diego County). Along the I-15 route are three NCCP's as well.

These programs have been under development for over a decade and are inextricably linked to land use and transportation plans for the participating jurisdictions through state and federal ESA law. CEQA documents for this project must include a description of anticipated impacts and the implications of locating routes along corridors. Mechanisms to insure compatibility with NCCP standards must be identified.

Land Use and Transportation Planning

The proposed project is intended to run along the I-15 corridor through Riverside into San Diego County. The I-15 corridor, essentially at or beyond capacity at this time, is a primary focus of the Regional Transportation Plan that has been under development for a number of years in San Diego.

The RTP proposes a number of improvements along I-15 including managed HOV lanes, a bus-rapid-transit system, and connectors. These improvements will essentially use up remaining Caltrans easements along the corridor. (The DEIR/EIS does not address this fundamental easement issue.) The cost of building and operating system improvements along the I-15 runs into the billions of dollars. This investment of significant public funding in planning and implementation is not reconciled with the proposed high speed rail project. How for example will the HSR project interface with the RTP infrastructure investments, technologies, and ridership? How will the HSR project interface with land use and development strategies that are being linked to the RTP? What mechanism is in place to insure appropriate phasing of improvements for the projects if and when they are linked?

Summary

In conclusion we hope that our limited comments contribute to a decision to redistribute a revised, improved, and legally defensible DEIR/EIS. A project of this magnitude and potential deserves nothing less.

Thank you for your consideration.

Sincerely
Michael Beck
San Diego Director

O054-2 cont.

O054-2 cont.

O054-3



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**Response to Comments of Michael Beck, San Diego Director, Endangered Habitats League, August 30, 2004  
(Letter O054)**

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**O054-1**

Section 2.6 of the Final Program EIR/EIS describes the overall HST system alternative. Chapter 6A describes the preferred system of HST alignment and station options.

**O054-2**

Please see standard response 3.15.2 regarding level of detail regarding biological impacts. The Co-lead agencies have and will continue to look for ways to first avoid adverse environmental impacts. The identification and selection by the Co-lead agencies of the HST rather than the Modal Alternative would avoid significant impacts, as identified in the PEIR/S. A number of HST alignments (e.g., through Henry Coe State Park and the Orestimba State Wilderness) have also been dropped from further consideration by the Authority, in large part due to anticipated adverse impacts from these alignments (e.g., HST alignments in the LOSSAN Corridor). Additional avoidance of impacts will be pursued in the more-detailed, Tier 2 evaluations of selected HST alignments and corridors (please see standard response 3.15.13). For example, detailed HST alignments would be refined at the project level within the overall corridor alignment option identified in the through the program environmental process (please see standard response 3.15.6). As discussed throughout this Final PEIR/S and to be consistent with both NEPA and CEQA, the Co-lead agencies must prepare complete NEPA and CEQA documentation for future Project level, Tier 2 environmental reviews rather than just "limited reviews." Please see standard response 3.15.10 regarding use of MSCPs and MHCPs in the PEIR/S analyses.

**O054-3**

It is assumed that the HST alignment option would be developed in concert with other improvements within the I-15 corridor. In most cases the corridor, as planned, would allow for the inclusion of the HST alignment. As part of the PEIR/S process, only conceptual designs could be developed for all the alignment options. The detailed analysis called for in this comment would be completed as part of the project-level, Tier 2 studies. Please see Standard Response 3.15.13 regarding the two-step environmental process. Please also see standard response 10.1.7 in regards to project phasing.

**Comment Letter O055**

**O055**

**Downtown Visalians & Alliance**  
*Business and Property Owners Working Together to Enhance Downtown*  
104 South Church Street                      Visalia, California 93291

August 30, 2004



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

Dear Members of the Authority:

On behalf of the Board of Directors of Downtown Visalians, we urge your support of the Union Pacific railroad alignment with the Highway 99 corridor through the Central Valley.

Visalia is located on the Highway 198 connector to Highway 99. It is the "Gateway to the Sequoias". We find this is an exciting project which can bring more tourism and jobs to our community.

Downtown Visalians is a non-profit association of business owners who tax themselves in order to improve their community. Our downtown is one of the few in the valley not struggling to become renewed again. This community has worked hard to grow concentrically and maintain a healthy city center.

Thank you in advance for your consideration of this request.

Sincerely,

Anthony Holman  
President

O055-1

Phone: 559-732-7737  
Fax: 559-732-7750  
Email: dtv2004@pacbell.net  
Explore: www.downtownvisalia.com



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

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**Response to Comments of Anthony Holguin, President, Downtown Visalians and Alliance, August 30, 2004  
(Letter O055)**

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**O055-1**

Acknowledged. Please see Standard Responses 6.15.4 and 6.21.1.

Comment Letter O056

O056



IMPACT SCIENCES

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impsci@impactsciences.com

AUG 31 2004

August 30, 2004

Attn: California High Speed Rail  
Draft Program EIR/EIS Comments  
925 L Street, Suite 1425  
Sacramento, CA 95814

Subject: Comments to the Draft EIR/EIS for the Proposed California High-Speed Rail Train System

Dear Ladies and Gentlemen:

Impact Sciences, representing our client, Tejon Ranch, is pleased to submit this comment letter to the Draft EIR/EIS California High-Speed Train. Our comments will demonstrate, the analysis prepared in the EIR/EIS is often deficient, does not meet the intent of CEQA or NEPA, and, at times, appears to present insufficient information. Although this is a Program EIR/EIS, it does not provide a sufficient level of detail in the analysis to permit informed decision-making and to satisfy the public disclosure requirements articulated under CEQA Guidelines Section 15003. Nor does this document satisfy the requirements for the National Environmental Policy Act. Section 102 of the National Environmental Policy Act requires that the responsible agency study, develop and describe appropriate alternatives to the proposed project. Section 1502.14(e) requires that the degree of analysis devoted to each alternative be substantially similar to that of the proposed project. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

Clearly, this is not the case for this EIR/EIS. As you are aware, different environmental analysis sections within the EIR/EIS are analyzed to different levels of specificity. For example, some sections (e.g., Energy) indicate that there are not specific plans necessary to provide a detailed review. Yet other sections (e.g., Noise and Land Use) provide a more detailed analysis. Our client, Tejon Ranch, has indicated that they have seen very detailed specific engineered drawings for some or all of the Bakersfield to Sylmar alignments. Clearly, plans have been made available for the evaluation of some environmental topics yet other sections are very generic in their discussion and conclusions, supposedly due to lack of specific alignment information. If engineering drawings were available, they should have been used for the environmental analysis within the EIR/EIS. Instead, many of the sections are evaluated using a "broad-brush" approach when, in fact, a more detailed analysis should have been prepared.

In the case of the High-Speed Train project, clear and detailed engineering plans could easily have provided "significant new information," resulting in a substantial increase and or new conclusions with regard to environmental impacts, and possibly new mitigation. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

California High Speed Rail  
August 30, 2004  
Page 2

If you have any questions with regards to our comments, please do not hesitate to call me.

Very truly yours,

IMPACT SCIENCES, INC.

Susan Tebo  
Associate Principal



CALIFORNIA HIGH SPEED RAIL AUTHORITY



U.S. Department  
of Transportation  
Federal Railroad  
Administration

Comment Letter 0056 Continued

SECTION 3.1 - TRAFFIC AND CIRCULATION

The EIR/EIS provides an inadequate characterization of baseline transportation conditions and utilizes outdated regional forecasts to develop future baseline traffic conditions along the State Route 14 (SR-14) and Interstate 5 (I-5) study segments. For these facilities, traffic data relied upon to create the baseline condition dates to 1999; consequently, the information is five years old.

This deficiency is compounded by the reliance solely on the Southern California Association of Governments (SCAG) traffic model to forecast travel behavior within the region. The model used by SCAG relies upon a regional land use database that contains land use information on existing and future development patterns for the five county Southern California region based on local General Plans. This model was last validated in 1997 and does not reflect recent large-scale development plans for the western Antelope Valley.

When analyzing the cumulative impacts of a project under 15130(b)(1)(A) of the CEQA Guidelines, the Lead Agency is required to discuss not only approved projects under construction and not yet under construction, but also unapproved projects currently under environmental review, with related impacts or which result in significant cumulative impacts. This analysis should include a discussion of projects under review by the Lead Agency and projects under review by other relevant public agencies, using reasonable efforts to discover, disclose, and discuss the other related projects.

In March of 2004, the County of Los Angeles released the Notice of Preparation for an EIR on the Centennial Specific Plan. The Centennial Specific Plan is proposed on approximately 12,000 acres of land located in the northwestern portion of the Antelope Valley in Los Angeles County, approximately 38 miles northwest of the City of Lancaster and 32 miles north of the Santa Clarita Valley. This project requires several General Plan Amendments, including a change in designation from non-urban (among others) to Specific Plan in order to reflect the urban nature of the project. Buildout of the Specific Plan would result in a maximum of 22,998 dwelling units, over 1.9 million square feet of commercial space, and 12 million square feet of employment generating space in the form of business parks. The Specific Plan also designates land for the necessary supporting civic and institutional land uses, such as schools, parks, fire station, and library. No consideration is given to this project, despite the fact that it would likely have a substantial influence on travel patterns along SR-14, State Route (SR-138), and I-5.

The EIR/EIS also does not provide sufficient level of detail in the analysis to permit informed decision-making and to satisfy the public disclosure requirements articulated under CEQA Guidelines Section 15003. Nor does this document satisfy the requirements for the National Environmental Policy Act. Section 102(2)(E) of the National Environmental Policy Act requires that the responsible agency study,

3.1 Traffic and Circulation

develop and describe appropriate alternatives to the proposed project. Section 1502.14(e) requires that the degree of analysis devoted to each alternative be substantially similar to that of the proposed project.

Clearly, this is not the case for this EIR/EIS. While the document identifies the operating condition of the primary freeway segments and interchange locations for the existing and no project alternative, it fails to provide this same level of analysis for the modal and high-speed rail alternatives in the main body of the EIR/EIS. Instead, the reader must search through the technical appendix to locate the data. In the technical report, the SR-58 to SR-14 corridor is said to result in greater accessibility to proposed rail stations than does the I-5 alignment. This increased accessibility is said to reduce vehicle miles traveled on the study freeway network. Absent such information in the main body of the analysis, it is difficult for decision makers to conduct a meaningful evaluation comparing the merits and impacts of each alternative under consideration. This is a clear deficiency that must be addressed.

0056-1 cont.

0056-1



Comment Letter 0056 Continued

SECTION 3.3 - AIR QUALITY

The Air Quality Technical Evaluation only addressed the three system alternatives: No Project alternative, Modal alternative, and the High-Speed Train (HST) alternative (hereafter, referred to as the proposed project). However, within the proposed project there are several differing alignment alternatives. For example, the Bakersfield to Los Angeles rail segment of the proposed project has two route alignment options, one generally following the Interstate 5 corridor through the Angeles National Forest and the other following State Route 58 to the State Route 14 corridor through the City of Palmdale and the Antelope Valley. Although traffic data was available in the "Bakersfield-to-Los Angeles Traffic, Transit, Circulation & Parking Technical Evaluation" for an analysis of each of these route alignment options, the Air Quality Technical Evaluation did not assess HST impacts for each route alignment of the proposed project.

Two points need to be expressed regarding the route alignment options. First, the Air Quality Technical Evaluation does not identify which of the route options it used in evaluating the proposed project. Secondly, by not providing a separate evaluation for each route option, decision makers within the lead agency are unable to know the air quality impacts associated with each of these different routing options and will, therefore, not be able to make an informed decision. As an example, it is likely that potential passengers in the Palmdale area will ride the California High-Speed Train rather than commute by car if the lead agency chooses the State Route 58 to State Route 14 route alignment option, whereas these potential passengers would be bypassed and unable to utilize the proposed project if the lead agency chooses the Interstate 5 route alignment option of the proposed project. It is expected that these different route options will produce differing air quality impacts.

The lack of detail presented in the EIR/EIS extends to the characterization of baseline conditions. An EIR must describe the "environment in the vicinity of the project" as it exists before commencement of the project, from both a local and regional perspective. 14 Cal.Code of Regs §15125. Where basic information is missing from an EIR, the document is deficient as a matter of law. *San Joaquin Raptor v. County of Stanislaus* (1994) 27 Cal.App.4th 713,734. The HST EIR/EIS is deficient for omitting basic information available about all criteria pollutants. Under the Federal Clean Air Act, the EPA regulates six criteria pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), oxides of sulfur (SO<sub>x</sub>), particulate matter (PM) and lead. Under the California Clean Air Act, the California Air Resources Board regulates these same six criteria pollutants, as well as hydrogen sulfide, vinyl chloride, and visibility reducing particles. The EIR/EIS omits any description of existing air quality with respect to these last three elements. The EIR/EIS also understates the severity of the air quality experienced in the San Joaquin Valley Air Basin (SJVAB) as is summarized in Table 3.3-3. It would be helpful if the specific levels of nonattainment (e.g., moderate, serious, severe, extreme) were included in this table. Without this

information, the reader may conclude that the severity of air pollution in all the listed nonattainment areas is identical, which it is not.

More specifically, the SJVAB is extreme non-attainment for the 1-hour O<sub>3</sub> national ambient air quality standard. In December 2001, the U.S. Environmental Protection Agency (EPA) reclassified the SJVAB from serious to severe nonattainment for the 1-hour standard. The reclassification resulted from the failure of the SJVAB to attain the standard by November 15, 1999 as required for serious nonattainment areas. Under the severe classification, EPA requires the San Joaquin Valley Unified Air Pollution Control District (district) to prepare plans demonstrating attainment of the standard by November 15, 2005, and rate of progress (ROP) plans demonstrating reduction of O<sub>3</sub> precursor emissions at a rate of 3 percent per year, averaged over a 3-year period. The most recent Ozone Attainment Plan ROP was prepared in December 2002 for the years 2002 through 2005. Please revise the EIR/EIS to include the above noted information.

However, the district has determined that the actions identified in the 2002 and 2005 ROP Plan will not fulfill EPA's requirement for a plan that will demonstrate attainment of the O<sub>3</sub> standards by November 15, 2005. Consequently, the EPA issued a Federal Register notice with a finding of Failure to Submit attainment demonstration & additional severe status items, which initiated a process by which sanctions, including loss of federal dollars for highway projects, begins. In August 2003, the district Governing Board adopted a Resolution requesting reclassification to extreme by no later than January 2004. This action allows more time for additional control measures to be implemented in order to reach attainment (November 15, 2010 instead of November 15, 2005), but also institutes more stringent requirements such as lowering major source emission thresholds from 25 tons per year to 10 tons per year. EPA approved the request for reclassification in April 2004. An Extreme Ozone Attainment Demonstration Plan is presently under development.<sup>1</sup> Such a detailed description for each relevant air basin would provide important information to ascertain the potential impacts or benefits of alternate routes for the HST, and consequently, must be included in the text of the EIR/EIS.

Another measure of air quality is the emissions, or levels of, Hazardous Air Pollutants (HAPs, also called Toxic Air Pollutants (TACs) under California law) in ambient air. The ARB presently monitors and assesses the health risk of 10 HAPs in California, including acetaldehyde, benzene, 1,3 butadiene, carbon tetrachloride, chromium (hexavalent), para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter. The EIR/EIS fails to describe any of these HAPs, the total amount produced in the Air Basins studied, or the potential health impacts attributable to the HAPs,

<sup>1</sup> San Joaquin Valley Air Pollution Control District, *Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone*, December 2002.

0056-2

0056-2 cont.



Comment Letter O056 Continued

3.3 Air Quality

despite the fact that such information is readily available. Public health impacts are associated with these HAPs. In many air basins, the primary source of HAPs is motor vehicles, which emit benzene, 1,3-butadiene, formaldehyde and diesel particulate matter. These particular HAPs are responsible for most of the health impacts in the air basins in which the HST would operate. The HST would reduce motor vehicle emissions, resulting in a similar reduction in the associated health impacts. The EIR/EIS must discuss this issue.

The Air Quality Technical Evaluation only summarizes the analysis and does not contain information or data sets that would allow for a critical review of the analysis process or verify the quantitative results. Information which is lacking, includes emission factors used for the various mobile and stationary sources (motor vehicles, diesel locomotives, aircraft, and electric generating stations), number of vehicles assumed for each of the alternatives, average speed of the vehicles, atmospheric conditions (primarily the range of temperature and humidity variations) assumed, and whether or not the on-road pollutant burden calculated for each of the alternatives took into account cold start emissions, warm start emissions, hot start emissions, evaporative emissions, and diurnal emissions. Similarly, the number of plane operations and number of train movements were not quantified for each of the alternatives. These assumptions need to be presented in the Air Quality Technical Evaluation report supporting the findings in the California High-Speed Train Program EIR/EIS in order to provide public agencies and the public the ability to give meaningful comments on the adequacy and accuracy of the air quality evaluation.

In its discussion of criteria pollutants and greenhouse gases, the EIR/EIS presents conflicting and confusing terminology. For example, the EIR/EIS refers to hydrocarbons (HC) as being identified by EPA to be of nationwide concern. As precursors to O<sub>3</sub>, the EPA only regulates those HCs that have been found to contribute to O<sub>3</sub> formation. These compounds are also called volatile organic compounds, reactive organic compounds, or reactive organic gases by the air districts governing emission sources in the regions through which the HST would operate. Similarly, HC and NO<sub>x</sub> are identified as greenhouse gases, when it is only hydrofluorocarbons and perfluorocarbons, methane, and nitrous oxide (N<sub>2</sub>O), as well as carbon dioxide, that have been associated with global climate changes. In addition, the EIR/EIS quantifies emissions of total organic gases (TOG), when the air district's thresholds of significance are based on reactive organic gases (ROG) (or equivalent terms). We recommend that one term for each substance be used consistently throughout the EIR/EIS.

It is unclear how the analysis in the Air Quality Technical Evaluation assessed on-road pollutant burdens for each of the alternatives. On page 3.3-56 of the Air Quality Technical Evaluation, the statement is made that "On-road pollutant burdens were calculated as a ratio of baseline VMT [Vehicle Miles Traveled] to estimated VMT changes under each alternative." Calculating ratios of baseline VMT to estimate changes under each alternative is an inappropriate approach in that it is not consistent with the

O056-2 cont.

3.3 Air Quality

traffic data in the Program EIR/EIS and does not accurately assess vehicle miles traveled under each alternative. The "Emission Inventory Procedural Manual" published by the California Air Resources Board requires that the EMFAC2002 computer model be used in determining on-road emissions inventories prepared for air quality plans in California. The analysis needs to utilize the traffic data in the "Traffic, Transit, Circulation & Parking Technical Evaluation" along with results from the California Air Resources Board emissions computer model EMFAC2002 to predict on-road pollutant burdens for each of the alternatives. This suggested methodology would benefit the air quality analysis in that the air quality evaluation will be much more accurate than the ratio approach, the analysis would be consistent with the traffic data used in other portions of the Program EIR/EIS, and would follow long established procedure consistent with the recommendations of the California Air Resources Board for estimating on-road emissions burdens.

On page 3.3-8 of the Program EIR/EIS, the discussion states that "detailed intersection information has not been generated" to facilitate an analysis of localized air quality impacts. This statement is incorrect. In Appendices Q through U of the "Traffic, Transit, Circulation & Parking Technical Evaluations" for each segment of the proposed project there is detailed intersection analysis that shows estimated volumes of traffic during the peak hour, estimated volume to capacity (V/C) ratios, and estimated level of service (LOS) values for each alternative. This information combined with emissions data from the EMFAC2002 computer model, and climate data (average temperature and wind speed) is all that is needed to conduct an analysis of localized air quality impacts.

The California Department of Transportation describes the state and national guidelines for conducting localized air quality impacts in a publication titled "Carbon Monoxide Protocol" (hereafter referred to as the Protocol). The Protocol requires that intersections impacted by the proposed project with LOS D or below conduct a detailed localized air quality impact analysis using the CALINE4 computer model. The Air Quality Technical Evaluation failed to conduct this analysis. CEQA Guidelines Section 15064 (d) requires that lead agencies consider both direct and indirect physical impacts when evaluating the potential for significant impacts. The Program EIR/EIS, in failing to address localized impacts even though all the information is available to do so, also failed to assess all of the reasonably foreseeable environmental impacts associated with the proposed project. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

The air quality analysis did not address short-term construction impacts that would be associated with the proposed project. CEQA Guidelines Section 15126 states that "All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development [i.e., construction], and operation." On page 7-2 of the Program EIR/EIS, the discussion states that, "The potential impacts of this construction activity would be addressed in more detail during project-level

O056-2 cont.



Comment Letter O056 Continued

3.3 Air Quality

analysis." While additional analysis may be required on a project by project-level analysis in the future, information is currently available to assess construction activities as a result of the proposed project on a programmatic level. For example, rail alignments, rail configurations, tunneling alignments, and terminal station configurations are all described in "Alignment Configuration and Cross Sections" and "Engineering Criteria" reports for the proposed project. This information could be used in evaluating potential construction impacts and proposing programmatic level mitigation measures. In this way, the project is afforded the opportunity to address regional impacts and overall project phasing that would not be possible in individual future project by project-level analyses. It is interesting to note that in most other sections of the Program EIR/EIS construction impacts were addressed.

In addition, the EIR/EIS must compare the construction impacts of the route options, possibly in terms of miles of rail to be installed and/or anticipated acreage of land to be graded. This would help decision makers to understand and compare the construction impacts of the route options. The Air Quality evaluation in the Program EIR/EIS needs to address construction impacts on a programmatic level and propose programmatic mitigation measures.

The Program EIR/EIS did not establish clear thresholds of significance or make significance findings for air quality impacts. CEQA Guidelines Section 15126 requires that an EIR identify potentially significant environmental impacts associated with proposed projects. CEQA Guidelines Section 15064(b) requires that the lead agency make a determination of whether a project may have a significant effect on the environment based to the extent possible on scientific and factual data. CEQA Guidelines Section 15064.7 encourages lead agencies to "develop and publish thresholds of significance..." On page 7-4 of the Program EIR/EIS the discussion states that, "Given the planning-level impact analysis considered in this Program EIR/EIS, the Authority has not developed project-specific significance thresholds." While it may be true that the "Authority" has not developed its own significance thresholds, this does not alleviate the Program EIR/EIS from using significance thresholds in its evaluation and making a determination of significance related to air quality impacts. Since the Program EIR/EIS failed to make significance findings or establish significance thresholds for air quality impacts, the analysis in the Program EIR/EIS is in violation of CEQA. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

If the "Authority" is unable to develop and publish its own significance thresholds, the "Authority" may use thresholds established by the Air Pollution Control Districts or Air Quality Management Districts for regional air pollutant criteria in each air basin so long as the "Authority" explains how the thresholds are pertinent to project impacts. In an earlier comment, it was suggested that a listing of the specific classifications of nonattainment status (e.g., moderate, serious) be presented. The degree of severity of the air quality problem in each air basin is generally reflected in their significance thresholds.

3.3 Air Quality

Accordingly, project impacts in a more polluted air basin could be significant, while the same level of impact in another basin may be less-than-significant. This comparison could provide additional information to determine which of two route options would be less likely to produce significant impacts. This is entirely consistent with the concept of comparing alternatives under CEQA as specified in Section 15126.6 of the CEQA Guidelines.

O056-2 cont.

O056-2 cont.



Comment Letter O056 Continued

SECTION 3.4 - NOISE AND VIBRATION

Noise

The analysis of noise and vibration impacts contained in the EIR/EIS omits important analysis and contains inconsistencies that compromise the integrity of the conclusions. In addition, the analysis lacks information on the extent of the impacts for mitigated alternatives while mitigation for the proposed project is described in generic terms. No substantive analysis is provided in the EIR/EIS that allows for comparison of impacts between alignments.

Limitations of the Noise Analysis in Support of the Draft EIR/EIS for HSR System Route Selection

Method and Criteria for Evaluation of Impacts

The method and criteria used for evaluating noise and vibration is based upon procedures in two documents prepared by the U.S. Department of Transportation (USDOT):

1. Federal Railroad Administration, "High-Speed Ground Transportation Noise and Vibration Assessment, Final Draft," December 1998.
2. Federal Transit Administration, "Transit Noise and Vibration Impact Assessment," April 1995.

The two USDOT publications use the same noise impact criteria and application method. These criteria use Ldn to quantify the noise environment of residential communities, including hospitals and hotels.<sup>2</sup> The noisiest hour L<sub>eq</sub>(h) is used to evaluate other land use categories.<sup>3</sup> The use of Ldn and L<sub>eq</sub> to evaluate environmental noise impacts is the accepted standard for rail projects.

These criteria utilize existing estimates of community noise in the determination of noise impact in that the analysis uses both the noise from project sources and the relative difference between the project noise and the existing ambient noise level. The criteria use three regions of effect: No Impact, Impact, and Severe Impact. For higher existing noise environments the allowable increase in the cumulative noise is decreased. For noise environments where the existing Ldn is less than 55 dBA, the project noise may be higher than existing noise environments and where the noise environment is greater than 55 dBA the project noise must be less than existing noise.

<sup>2</sup> Day-Night Average Sound Level (L<sub>dn</sub>) - Ten times the logarithm to the base 10 of the ratio of the day-night average sound pressure to the reference sound pressure of 20 micropascals. The day-night average sound pressure exposure is defined for a 24-hour calendar day and calculated by adding the sound exposure during the daytime (0700 to 2200 hours) to 10 times the sound exposure obtained during the nighttime (2200 to 0700 hours).

<sup>3</sup> Equivalent Sound Level (L<sub>eq</sub>) - The equivalent sound level, L<sub>eq</sub> is the level of a constant sound which, in the given situation and time period, has the same sound energy as does a time-varying sound. Technically, equivalent sound level is the level of the time-weighted, mean, square, A-weighted sound pressure. The time interval over which the measurement is taken should always be specified.

3.4 Noise and Vibration

These criteria, however, were never applied directly in the analysis. Instead, screening distances that are presented in the FRA and FTA documents were utilized to define regions of potential impact. These screening distances were categorized by train speed (indicates how much noise is produced), type of corridor (an indication of existing noise environment) and land use (an indication of existing noise environment).

In order to assess the validity of using these screening distances the report performed "typology" evaluations for eleven locations between the Bakersfield and Sylmar stations within screening distances between 50 and 900 feet. The report estimated ambient noise levels to be between 50 and 62 dBA. The analysis found "significant impact" at all locations.

The number of people potentially impacted may be underestimated since "Significant Impact" is 5 dB above the threshold of "Impact" and, therefore, screening distance may not be adequate to include all populations that are "Impacted." It is difficult to determine if this would bias one alignment over the other.

It is not clear how the HST impact criteria, which uses a sliding scale depending upon ambient noise, can be compared to airport impacts that use a single number of Ldn 65 dBA to define populations impacted.

The method of quantifying potential noise impacts from highways was not explained sufficiently to be able to evaluate the adequacy of the numbers that were presented in the technical report.

Vibration

The two USDOT publications use the same vibration impact criteria and application method. These criteria use ground-borne vibration levels (VdB) and ground-borne noise levels (dBA) to evaluate vibration impact on land use categories.

The use of VdB and dBA to evaluate vibration impacts is the accepted standard for rail projects. These criteria use absolute values of vibration and ground-borne noise to assess impacts for three land use categories. The values listed in the HST documents correspond to those in the USDOT documents.

However, these criteria are never applied directly. Screening distances developed by FRA and FTA for two speed ranges, < 100 mph and 100 to 200 mph, (labeled as < 125 mph and ≥ 125 mph in the HST documents) were used to define regions of potential impact. The amount of ground-borne vibration goes up 6 VdB with a doubling of speed (FRA, p. 8-7) and goes down approximately 7 VdB for each doubling of distance (FRA, p. 8-4). Consequently the use of screening distances may under or over estimate the area of effect depending upon the speed of the train, and depending upon how different the operating

O056-3

O056-3 cont.



**Comment Letter O056 Continued**

3.4 Noise and Vibration

speeds are from the average in these ranges. Screening distances may be too large near stations where the speeds would be lower, and too small where trains operate at the rated speed. It is difficult to determine if this limitation would bias one alignment over another.

The FRA document directs that the analysis move from the “screening analysis” to the “general assessment” if one or more of the noise sensitive land uses are within the screening distances. According to the noise report this analysis would trigger a “Tier 2 Analysis” once the HST system is approved.

**Deficiencies of the Bakersfield to Sylmar HSR Route Alignment Evaluations and Impact Comparisons**

In order to compare alternatives, the HST report introduced the concept of “Impact Metric” (IM) to estimate the number of people per mile impacted. The IM uses the screening distances, land use designation, and the corresponding population density to estimate the number of residences. The analysis used a GIS database containing 2 Anderson Land Use categories: 11 (residential) and 16 (mixed use). The number of schools and hospitals within the screening distances were also identified. Parkland and hotels were excluded in the IM scheme.

The population density contained in the GIS database was not available for review. The accuracy and applicability to the range of land uses along the alternative corridors is unknown.

The IM weighted these numbers as shown below:

Description	Weighting	Result of Weighting
Residential	1	Number of people
Mixed Use	0.3	30% of population residential
Hospitals	100	100 persons per hospital
Schools	250	250 persons per school

The IM uses people per mile inside the screening distance. It is difficult to understand how using number-impacted-per-mile to compare with other modal systems such as airports, where at best one would use impacts per square mile, is appropriate. In addition, use of a “density” in either case can hide information on the total population impacted. The total number of people potentially impacted by each alternative should be the base for evaluating alternative corridors and the alternatives to the project.

Once the number of people impacted per mile (IM) was determined for each segment, an Impact Rating scheme (IR) for both noise and vibration was used to assign a High, Medium, or Low impact for that segment. The IR assignment method is summarized in the table below:

3.4 Noise and Vibration

IR	Noise	Vibration
High	IM > 200	IM > 100
Medium	80 < IM < 200	40 < IM < 100
Low	IM < 80	IM < 40

The necessity of this scheme is not clear nor is its application. There is no justification for the assertion that to get the same rating, twice as many people must be impacted by noise as by vibration.

The IM and IR schemes disguise the magnitude of the impacts. The comparison should be “Number of People Impacted” by either noise or vibration, not number per mile. In contrast, the total impacted population of the other modes of transportation can be quickly compared. That analysis does quantify the potential number of people impacted by noise and vibration.

The IR scheme was applied to sections of each corridor rather than to an entire corridor. The only justification for a “High,” “Medium,” or “Low” qualitative assessment would be in comparing alternative alignments, however, not sections within an alignment.

The introduction of the “Impact Metric” and “Impact Rating” schemes is neither appropriate nor supported by the USDOT procedures.

The population potentially impacted is addressed in Table 4.5.1, Table 5.5.1, and the tables in Appendix A of the noise report, pages A-1 to A-7. Unfortunately the populations presented in these tables for the alternative routes between Bakersfield and Sylmar do not agree:

Alternative	Noise			Vibration		
	Table 4.5.1	A-1	A-6	Table 5.5.1	A-3	A-8
Union Ave + Tehachapi	1153	853	1153	654	354	654
Wheeler Ridge + Tehachapi	1418	1268	1418	199	199	199
SR-58 + Soledad Canyon	477	613	477	240	238	240

Some of the disagreement is whether or not three buildings were either schools or hospitals. Section 3.4 of the EIR/EIS identifies them as schools.

There also seems to be an error in counting residential populations along the alignments. For noise, the range of screening distances for residential land uses is 375 to 900 feet, whereas for vibration it is 200 to 220 feet. Therefore, the number of residents potentially impacted by noise should always be greater than or equal to the number impacted by vibration. However, comparing the tables on page A-1 and A-3 of

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cont.

**Comment Letter 0056 Continued**

3.4 Noise and Vibration

the technical report, two segments (I-5: Tehachapi Corridor and SR-58 Corridor) have more residents identified as potentially impacted for vibration than for noise:

Alignment	People Impacted by Noise (A-1)	People Impacted by Vibration (A-3)
I-5: Tehachapi Corridor	70	109
SR-58 Corridor	40	118

The reported numbers of people impacted by noise and vibration are inconsistent with the screening distances. The conclusions regarding corridor comparisons may not be valid.

**Failure to Disclose Potential Effects on Biological Resources**

Operation of the rail line would generate noise levels in excess of 90 dB (A) when operating at velocity. While noise is generated by a variety of sources including wheel/rail interaction and motors/gears, the primary source is unsteady airflow that creates aerodynamic noise. The EIR/EIS fails to address potential impacts to biological resources known to occur in the Tehachapi Mountains despite the amount of literature that clearly establishes a link between noise levels and the integrity of habitat. This is a deficiency that must be addressed.

For example, in his article "Niche Hypothesis," Bernard Krause suggests that every creature has an "aural niche" or its own particular voice and specific place in a habitat based on the relative frequency, amplitude, timbre, and duration of the sound it produces. Taken together, the vocalizations of all the creatures in a given habitat zone produce a unique vocal fingerprint which Krause believes can be used to infer the biological integrity of the area. With increasing destruction and loss of habitat, many creatures are forced into different areas with consequently different aural zones in which they lack an established niche. The inability of creatures to successfully communicate or otherwise employ their auditory senses is detrimental to the long-term survival of these displaced creatures and the overall biological integrity of the environment. Krause thus argues that in natural areas "...the sounds of each of these zones are so unique and important to creature life in a given location..." that disturbance to this soundscape could be detrimental to the future of the individuals, populations or entire species (Krause, 1993).

Harrington and Veitch published "Short Term Impacts of Low-level Jet Fighter Training on Caribou in Labrador" in December of 1991 at the conclusion of their 1986-1988 studies of Rangifer tarandus. Satellite telemetry, video tape, visual observations, and radio collars were used to determine the effects of exposure to noise by indirect measurement of the caribou's daily movements and activity levels. They observed that the usual response of the caribou to the jet overflights was a startle reflex (an activation of the sympathetic nervous system), which induced bolting and running. Harrington and Veitch noted that the startle response, although short-lived, did pose a threat during calving season by increasing the

3.4 Noise and Vibration

likelihood of: cow and calf separations, injuries to newborn calves (if the mother were to bolt) and stillbirths.

A study of the potential effects of helicopter noise on big horn sheep time budgets in the Grand Canyon by Berger et al. looked at if and/or how food intake might be impaired. They found that during the winter *Ovis canadensis nelson* were more sensitive to noise such that the sheep experienced a forty-three percent reduction in foraging efficiency. In the spring however, they found no significant effect in foraging efficiency. The disturbance threshold they calculated for big horn sheep in regards to helicopter altitude was 250-450 meters which lead them to hypothesize that the difference in disturbance between spring and winter was due to the migration to lower elevations in the spring which created a greater distance between them and the helicopter.

A 1996 study "Effects of Simulated Jet Aircraft Noise on Heart Rate and Behavior of Desert Ungulates," questioned the management objectives of public lands and the congruity of allowing military airspace to be underlain by National Parks and other wildlife refuges given the disturbances created by the noise of military aircraft. The purpose of the study was to determine the cardiac responses (immediate and long-term) of desert mule deer and bighorn sheep to simulated low-level aircraft noise and to establish whether or not the animals become habituated to such exposure.

During the summer, and late summer, desert mule deer exhibited a significant increase in heart rate one minute before an aircraft passed overhead and during the overpass, but no significant increase was detected beyond two to three minutes after the overflight. During the spring their heart rates were significantly elevated before, during, and up to three minutes following the overflight. Big horn sheep had significantly elevated heart rates at the time of the overflights and for three minutes after the aircraft passed during the two summer seasons, but during the spring a significant increase in heart rate was only observed during the direct overpass. For both deer and sheep the intensity and frequency of alerted and alarmed responses to aircraft was greater in the summer than in other seasons. This finding was consistent with past studies as was the finding that aircraft that generated louder noise caused greater elevations in heart rate.

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cont.



Comment Letter O056 Continued

SECTION 3.6(5) - ENERGY

The "Draft Statewide Energy Technical Evaluation" only addressed the three system alternatives: the No Project alternative, Modal alternative, and the High-Speed Train alternative (proposed project). As indicated in the comments on air quality, the proposed project has several differing alignment alternatives.

Although traffic data was available in the "Transit, Circulation & Parking Technical Evaluation" for each of the route alignment options, the "Draft Statewide Energy Technical Evaluation" did not assess impacts for each route alignment of the proposed project. This section does not allow the reader to determine, in a comparative fashion, the impacts of one alignment when compared to another. As written, there is no way for the reader to come to any conclusion that one alignment is preferable to another.

For consistency purposes and to provide the reader with a breakdown of the energy impacts of each alignment, the section should be re-written to include a breakdown of the anticipated energy use for each of the potential alignments. The energy evaluation does not indicate which route alignment option it used in the analysis of the proposed project, thereby making the analysis meaningless, as it is likely that these different route options will produce differing energy impacts.

Clearly the impacts associated with the I-5 alignment would be far greater than the SR-58 alignment which is generally at-grade, yet the EIR/EIS does not make a clear distinction between the two alignments. Why is this distinction of impacts not called out in the EIR/EIS? At present, the Program EIR/EIS does not address all environmental impacts associated with each route alignment option in order for decision makers to assess the differences when making a decision on the proposed project, and must be revised to do so.

The "Draft Statewide Energy Technical Evaluation" only summarizes the analysis and does not contain information or data sets that would allow for a critical review of the analysis process or verify the quantitative results. The data sets and assumptions used in the energy analysis need to be presented in the "Draft Statewide Energy Technical Evaluation" or the Program EIR/EIS in order to provide public agencies and the public the ability to give meaningful comments on the adequacy and accuracy of the energy evaluation.

The Program EIR/EIS did not make a determination as to the significance of energy impacts. CEQA Guidelines Section 15126 requires that an EIR identify potentially significant environmental impacts associated with proposed projects. CEQA Guidelines Section 15064(b) requires that the lead agency make a determination of whether a project may have a significant effect on the environment based, to the extent

3.6(5) Energy

possible, on scientific and factual data. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

The Program EIR/EIS presents mitigation strategies for energy conservation. These mitigation strategies are so vague as to be meaningless. As an example, on page 3.5-22 of the Program EIR/EIS one mitigation strategy listed is "Use energy-saving equipment and facilities to reduce electricity demand." While the Program EIR/EIS is a broad program-level analysis reviewing potential energy use statewide, mitigation strategies this broad are useless. The programmatic level analysis should identify regional impacts and find regional mitigation strategies designed to address those impacts. In this way, a program level analysis is able to take advantage of regional level mitigation that project-level analysis would not be capable of doing.

A conclusory statement needs to be provided at the end of this section summarizing potential impacts for each of the alignments. Throughout the analysis text, the section concludes that there are potentially significant impacts associated with several of the alternatives but these conclusions are interwoven with analysis text in such a way that it is difficult for the reader to summarize which alternatives may have potentially significant impacts.

O056-4

O056-4 cont.



Comment Letter 0056 Continued

SECTION 3.6 - ELECTROMAGNETIC FIELDS AND ELECTROMAGNETIC INTERFERENCE

For consistency purposes the electromagnetic fields (EMF) and electromagnetic interference section should provide an existing conditions section associated with each of the alignment alternatives. If the alternatives alignments are proposed to travel through residential areas that should be discussed, as along with the general distance between edge of right-of-way and the location of residential units. The EIR/EIS states: "The study area for EMF/EMI associated with operation of the alternatives is limited to potentially affected land uses and populations in the vicinity of the alternative corridors." This is inconsistent with the analysis undertaken in other sections of the EIR/EIS.

As an example, in the Land Use and Planning, Communities and Neighborhoods, Property and Environmental Justice section analysis of impacts "for highway corridors (under the No Project and Modal Alternatives), and for the proposed HST alternative alignments, 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 alignments would be within or outside an existing right-of-way in the study area." If the conclusion regarding distance to the HST can be made in the Land Use section, this analysis must be undertaken in the electromagnetic fields (EMF) and electromagnetic interference sections also.

Each alignment must be discussed separately for a consistent analysis within all sections of the EIR/EIS. As a general point, the level of analysis appears to be more specific for certain subjects (e.g., Noise and Land use) and less specific for others (e.g., Electromagnetic Fields and Electromagnetic Interference). Engineering plans that are apparently available and have been used in conducting the impact analysis in some sections need to be used consistently throughout the entire EIR/EIS. To selectively choose the level of detail analysis from one section and another within the document is clearly contrary to the unbiased and impartial analysis required within by the CEQA Guidelines. All of the potential impacts within each section of the EIR must use the same detailed engineering plans when assessing and comparing alternative alignments in order to ascertain the real and true impacts associated with the project.

The Electromagnetic Fields (EMF) and Electromagnetic Interference section states that there are no standards for evaluating EMF impacts and that "[T]here is no evidence to substantiate a relationship between ELF electric fields and cancer." The section further concludes that there are no established adverse impacts associated with EMF exposures; yet, the EIR/EIS suggests mitigation measures to reduce impacts. If there are no impacts, why would mitigation measures be proposed? CEQA Guidelines Section 15126.4(a)(3) states: "Mitigation measures are not required for effects which are found not to be significant." CEQA Guidelines Section 15126.4(a)(1) requires that "[A]n EIR shall describe feasible measures which could minimize significant adverse impacts..." Therefore, if there are no significant

3.6 Electromagnetic Fields and Electromagnetic Interference

adverse impacts, no mitigation need be proposed, which would seem to be the case with electromagnetic fields and electromagnetic interference associated with the proposed project.

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Comment Letter 0056 Continued

SECTION 3.7 - LAND USE AND PLANNING, COMMUNITIES AND NEIGHBORHOODS, PROPERTY, AND ENVIRONMENTAL JUSTICE

Land Use, Communities and Neighborhoods, and Property

The method of evaluation of land use compatibility and property impacts relies upon very broad and potentially imprecise assessments of land use types, density categories, and proximity to Modal and HST alignment alternatives. The definitions of low, medium, and high compatibility and property impact rankings are so highly generalized as to make them almost meaningless without some form of quantification (i.e., residential density, as in dwelling units per acre).

Although similar to the reliance upon regional and local general plans as a broad measure of compatibility, the method of evaluation used in this section does not conform specifically to the CEQA Guidelines Appendix G Land Use and Planning criteria, generally relied upon as the measures of land use and planning thresholds of impact significance. These criteria are:

- a) Physically divide an established community;
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

Other than mentioning the general policies of many jurisdictions (unnamed) to promote transit and transit-oriented development, there is no meaningful discussion of local land use policies in this section. There is no mention of any specific plans or zoning designations anywhere in the section. For example, the planned I-5 rail alignment from Bakersfield to Los Angeles would travel directly through the Tejon Industrial Complex East Specific Plan area located south of the SR-99/I-5 split. The Kern County Board of Supervisors approved this project in January 2003, permitting approximately 15 million square feet of industrial, warehouse, and highway commercial development on approximately 1,100 acres. No mention of this specific plan is contained in the EIR/EIS.

Along with cities and counties, agencies with jurisdiction over the project would include state and federal agencies, such as the U.S. Forest Service, Department of Fish and Game, US Fish and Wildlife Service and Army Corps of Engineers. Certainly the alternative HST alignments, and the I-5/Tehachapi alignment in particular, should be discussed with regard to management plans, policies, or regulations of the Forest Service, where such alignments directly or indirectly affect national forest lands.

Similarly, impacts on lands included within habitat conservation plans should be addressed, or, if the analysis is included elsewhere, cross-referenced to other sections of the EIR/EIS where an adequate

3.7 Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

consideration of these issues is included. One such Habitat Conservation Plan involves land located in the Tehachapi Mountains where the US Fish and Wildlife Service and Tejon Ranch Company reached agreement on a recently noticed Habitat Conservation Plan for the California Condor. The analysis contained in the EIR/EIS provides no information or analysis on the potential effects of the alignment alternatives on this Habitat Conservation Plan.

As with other sections of the EIR/EIS, the shifting frame of reference related to the alternative alignments (e.g., SR-58/Soledad Canyon v. 'Antelope Valley'; I-5/Wheeler Ridge v. I-5/Tehachapi) and segments (e.g., Bakersfield to Los Angeles, Bakersfield to Sylmar) and segments within segments (e.g., Bakersfield to Los Angeles 'north,' 'central' and 'south'), makes it very difficult to ascertain whether comparable geographical areas are being addressed and evaluated in the presentation of data and impact ratings. For example, do references to the 'Antelope Valley' alignment consistently refer to the entire SR-58/Soledad Canyon alignment, or merely to that portion of the alignment that traverses the Antelope Valley?

Environmental Justice

Presidential Executive Order 12898, issued in February 1994, requires all federal agencies to analyze environmental justice impacts when proposing public projects. The analysis is intended to determine whether minority and low-income communities are unfairly burdened by project impacts, with the goal of using mitigation measures to create a level playing field. In 1999, Senate Bill 115 was passed making environmental justice a requirement of CEQA as well (PRC §.72000-72001). Despite the importance of this subject, the EIR/EIS was found to lack even the most elementary NEPA requirements for this topical issue. The specific concerns are identified below.

Chapter 8 of the EIR/EIS describes seventeen scoping meetings conducted in preparing the EIR/EIS. Scoping is a public process required by NEPA, which should be conducted as early as possible after a Lead Agency decides to prepare an EIS. The scoping process is designed to determine the scope of issues to be addressed in an EIS and is intended to be an open process, incorporating the views of other agencies, as well as the public, regarding the scope of an EIS. Environmental Justice issues are usually a major component of the scoping process. The EIR/EIS documents seventeen scoping meetings conducted at various locations along the proposed project alignments between April 25 and May 23, 2001, and identified the proposed project route options preferred by those attending the meetings. However, the EIR/EIS provides no indication of the specific environmental justice concerns or issues that were raised by those who were contacted or the details of what transpired during these meetings. The EIR/EIS needs to be expanded to include: (1) documentation of the specific meetings conducted during scoping process, (2) specific descriptions of the efforts made to gather information from low-income and minority communities; and (3) a table that identifies the specific concerns raised by each of these groups.

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Comment Letter 0056 Continued

3.7 Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

The EIR/EIS did not address specific impacts in the discussion of environmental justice. Rather the discussion of environmental justice merely addressed whether or not minority or low-income populations were located in areas adjacent to the proposed project alignments. The discussion never indicates what type of impacts will be endured by these populations and whether or not the proposed action is likely to have disproportionately high and adverse health or environmental effects on minority or low-income populations.

"Environmental Justice Guidance Under the National Environmental Policy Act" published by the Council on Environmental Quality, Executive Office of the President requires that a determination needs to be made as to "whether a proposed action is likely to have disproportionately high and adverse human health or environmental effects on low-income populations, minority populations, or Indian tribes..." Implicit within this mandate is that adverse health and environmental effects are to be identified.

While the "Land Use and Planning Communities and Neighborhoods, Property, & Environmental Justice Technical Evaluation" briefly summarizes in tables whether or not low-income or minority populations exist along the various proposed project alignments, the evaluation does not indicate what types of adverse human health effects or environmental effects may occur and whether or not these effects disproportionately effect minority, low-income, or Indian tribe populations.

NEPA Guidelines (40 C.F.R. § 15022.22) requires that when information is incomplete or unavailable, the information must be obtained if costs are not exorbitant. All available data should be included, consistent with the mandate of NEPA. The Program EIR/EIS needs to be revised, and should document efforts made to obtain needed data. Where data is found to be unavailable or limited, the report should identify the cost associated with developing original data and indicate why such cost was determined to be exorbitant in the context of overall project costs.

It is difficult to see how the analysis and presentation of Environmental Justice issues in this section, both for the system alternatives and the HST alignment alternatives, meets the intent of Executive Order 12898, even at the program EIR/EIS level of review. Based on the information presented, it would not appear that these issues have been considered as required by EO 12898 "to the greatest extent practicable and permitted by law" in the EIR/EIS.

Specific Comments

The Table of Contents identifies this section of the EIR/EIS as "Section 3.7, Local Area Land Use, Communities and Neighborhoods, Development, Planning, Socioeconomics, and Environmental Justice," which differs from the title introducing this section.

3.7 Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

p. 3.7-1 (4<sup>th</sup> paragraph, 1<sup>st</sup> sentence): This sentence states, "[T]here are no specific state procedures prescribed for consideration of environmental justice issues related to the proposed HST system." There is no discussion on whether or not there are standards with regard to the modal alternative. For consistency purposes there must be discussion of any modal standards or a statement that there are no standards.

p. 3.7-5 (1<sup>st</sup> paragraph; 2<sup>nd</sup> to last sentence): The basis for the conclusion that the proposed HST system as a whole would not result in disproportionate impacts on minority and low-income populations is not explained here.

Figure 3.7-3, Existing Land Use-Bakersfield to Los Angeles. The regional scale and relatively indistinguishable pale colors make this exhibit almost useless as a tool in assessing or verifying land use compatibility impacts. What is the percentage of the alignment that is included in each land use category?

Figure 3.7-12, Potential Property Impacts Bakersfield to Los Angeles-HST Alternative. The regional scale of this exhibit makes it difficult to distinguish specific segments within each category (high, medium, low). In some instances, it appears as if two or three categories may be overlapping, although these cannot be clearly distinguished. What is the percentage of each alignment that is included in each land use category?

Table 3.7-1, Compatibility of Land Use Types. Multifamily residential is included under both 'medium compatibility' and 'high compatibility' categories. What explains this duplication?

p. 3.7-8 Bakersfield to Los Angeles. The 'three distinct sub-regions' referenced in this section—north, central, and south, are not clearly distinguishable based upon the descriptions here and at the top of page 3.7-9. Please indicate the limits of these sub-regions on one of the figures in the EIR/EIS. It should be noted that much of the central sub-region as it applies to the Antelope Valley alignment is not included in national forest, as described on these pages.

p. 3.7-11 A. Existing Conditions Compared to No Project Alternative. As the No Project Alternative described herein includes funded and programmed improvements, these improvements are presumably already known, and the impacts stemming from them could be discerned and generally described in this section, albeit at a program EIR level of detail. Therefore, this assessment would not be a speculative undertaking, as suggested here.

0056-6 cont.

0056-6 cont.



Comment Letter O056 Continued

3.7 Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

p. 3.7-12 Environmental Justice (3<sup>rd</sup> sentence). As on page 3.7-5 previously, the basis for the conclusion that either the Modal or HST Alternatives as a whole would not result in disproportionate impacts on minority and low-income populations is not explained here.

Comparison of Alternatives by Region - C. Bakersfield to Los Angeles

Land Use Compatibility - High-Speed Train Alternative (p. 3.7-18). This indicates that "...most of the proposed alignment options in this region would be constructed outside of existing transportation right-of-way,..." What alignment options other than the Wheeler Ridge/I-5/Tehachapi, the Union Station/I-5/Tehachapi, and SR-58/Antelope Valley/Soledad Canyon proposed options is this statement referring to?

p. 3.7-19. It is noted here that the I-5 Tehachapi Mountain potential cut and fill crossing near Tejon Lake in Castaic Valley may be in conflict with Tejon Ranch plans to build a low density residential village near Tejon Lake. Therefore, given the assumption made in the section, a conclusion should be made that that this alignment would be inconsistent with proposed development plans. Consideration must also be given to the approved Tejon Industrial Complex East Specific Plan located at the Laval Road interchange, which is also bisected by this proposed rail alignment.

Property-HST Alternative. Verification of the property impacts described in this section is difficult without clear mapping that illustrates those segments of each alignment that are included in the very broad, and potentially overlapping seven development-type categories included in prior Table 3.7-2 (i.e., Rural/Suburban, Suburban/Rural, Urban, Rural Developed, Suburban Industrial/Commercial, Urban Business Parks/Regional Commercial, Rural Non-developed). Mapping of this data layer at a suitable scale is needed to be able to independently confirm the mileages, percentages of alignment and impact ratings associated with each alignment in this discussion and on Figure 3.7-12. In viewing this figure, it would appear the percentage of alignment included within the 'high' property impact category for the Union Avenue/I-5 alignment is approximately the same or higher than the corresponding percentage for the SR-58/Soledad Canyon (Antelope Valley) alignment.

Environmental Justice - HST Alternative and Alignment Options Comparison (p.3.7-20). The shifting and confusing references to segments or portions of segments in these passages make it very difficult to understand the relative impacts of the basic alignment alternatives on minority populations. The reference to the proposed I-5 (Union Avenue and Wheeler Ridge) options as being potentially more compatible with existing land use than the SR-58 option (SR-58 only or entire SR-58/Soledad Canyon alignment?), would appear to be in conflict with conclusions reached for Union Avenue/I-5 under land use compatibility, communities and neighborhoods, and property impacts.

3.7 Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice

Mitigation Strategies

Land Use Compatibility. This brief statement merely addresses the scope of the subsequent review process in alignment and station location selection, but says nothing about strategies to mitigate land use impacts.

Environmental Justice. No justification or explanation is provided for the conclusionary statement that the HST system would not result in disproportionate adverse effects to minority or low-income populations.

O056-6 cont.

O056-6 cont.



Comment Letter 0056 Continued

SECTION 3.8 - AGRICULTURAL LANDS

General Comments

This section of the EIR/EIS provides only a very broad measure of potential impacts on farmlands and relies on an incomplete measure of thresholds of impact significance for agricultural resources, pursuant to the CEQA Guidelines.

3.8.1, Regulatory Requirements and Methods of Evaluation. This section cites PRC 21060.1 and CEQA Guideline 21095[a] as references for consideration of agricultural land conversions in the environmental review process. PRC 21060.1 defines 'Agricultural Land' as prime farmland, farmland of statewide importance, or unique farmland. CEQA 'Guideline' 21095[a] is actually the citation from the CEQA statute, not the Guidelines. PRC 21095[a] identifies the Land Evaluation and Site Assessment (LESA) Model as an optional method to ensure that significant effects on the environment of agricultural land conversion are quantitatively and consistently considered in the environmental review process. However, the method of evaluation of impacts that follows in Section 3.8.1, 3.8.2, and 3.8.3 does not utilize the LESA model to distinguish significant effects.

Where the LESA model is not utilized, reliance is placed upon CEQA Guidelines Appendix G criteria for impact significance (i.e., 'thresholds of significance'). In addition to conversion of prime farmland, unique farmland or farmland of statewide importance, the CEQA Guidelines Appendix G criteria for Agricultural Resources include 'conflicts with existing zoning for agricultural use or a Williamson Act contract' as an explicit factor to be addressed. Although the Williamson Act is described in Section 3.8.1, there is no further discussion or quantification of possible conflicts with Williamson Act contracts in EIR/EIS Section 3.8. The number of parcels under such contracts that are impacted by the Modal and HST System Alternatives, including the HST alignment options, should be identified, even at this Program EIR level of review. [Note: Section 7.3.1, CEQA Significance Thresholds, indicates the CEQA checklist thresholds (Appendix G) have been used to evaluate the significance of effects of the HST Alternative.]

Bakersfield to Sylmar Segment

Figure 3.8-11 is incorrectly identified in the List of Figures as the Modal Alternative Improvement Locations Bakersfield to Los Angeles. It is actually the High-Speed Train Improvement Locations, although the figure itself does not identify it as such.

The I-5 alignment HST options within the Bakersfield to Sylmar segment are identified as having the greatest potential farmland impacts (63 acres) (p. 3.8-16 and Table 3.8-1). The EIR/EIS failed to address

3.8 Agricultural Lands

impacts to farmland and the direct growth-inducing impacts of this alignment. This alignment would provide for shorter commute times to the Los Angeles region. For example, commute times to downtown Los Angeles would be substantially shorter than existing commutes. Given a shorter commute and the reduced housing costs of the Bakersfield area, there would be considerable pressure to convert more agricultural lands for residential uses. A similar comparison can be made to the San Fernando Valley development pattern of 50 years ago. Again, this was an agricultural area, with more affordable housing opportunities within a reasonable commute distance to downtown Los Angeles. One can expect a similar development pattern with the High-Speed Train, providing the shorter and more affordable commuting opportunities.

This is in contrast with the SR-58/Soledad Canyon (Antelope Valley) alignment, which is identified as having no impact on farmlands.

Section 3.8.5, Mitigation Strategies, suggests that specific farmland mitigation strategies should consider measures such as 'protection or preservation off-site lands to mitigate conversion of farmlands or acquiring easements, or payment of an in-lieu fee'. In this instance, the ability to mitigate the I-5 HST alignment's impact on farmlands through creation of agricultural easements or other identified measures may be limited by appellate court findings in *Friends of the Kangaroo Rat v. California Department of Corrections* [111 Cal.App.4th 1400 (2003)]. In this case, the court held that the creation of an agricultural easement does not fall within the definition of "mitigation" set forth in CEQA Guidelines 15370. Prime farmland is considered a finite resource, the loss of which cannot be mitigated by payments to continue farming on other lands already being farmed. Further, the court noted that acquiring undeveloped land for conversion to agricultural use would likely have natural habitat impacts, which are not environmentally beneficial, and converting developed land to farmland was infeasible for obvious reasons.

Short of avoidance of important farmlands altogether, the impacts of the I-5 HST alignment option within the Bakersfield to Sylmar segment are likely to be found to be significant and unavoidable, should this alternative be carried forward to project-level environmental review.

0056-7

0056-7 cont.



Comment Letter 0056 Continued

SECTION 3.9 - AESTHETICS AND VISUAL RESOURCES

The EIR/EIS fails to accurately characterize the visual setting along the I-5 corridor through the Tehachapi Mountains by ignoring the scenic qualities at Tejon Pass such as Tejon Lake, adjacent meadows and oak studded hillsides. The Kern County Circulation Element of the General Plan designates this segment of the I-5 as an "Eligible Scenic Route," while the County Master Environmental Assessment/Master Environmental Impact Report for the Year 2000 General Plan designates this segment of the I-5 corridor as Class III (Significant Value Visual Space).

The failure to account for these designations and resources results in an analytical gap for that segment of the I-5 traversing Tejon Pass and skewed the conclusions contained in the report. For example, the EIR/EIS fails to describe in any meaningful detail the potential visual impacts associated with the tunnel portals, construction stockpiles, and/or the roadways necessary for access. Staging of equipment and stockpiling of soils associated with tunnel portal construction in the hillside north of Tejon Lake would be highly visible from this segment of the I-5 corridor. Additionally, the analysis fails to consider the long term visual consequences associated with creation of the earthen berm (maximum height of 250 feet) needed to elevate the rail line at a gentle grade prior to entering the Tehachapi Mountains at the Grapevine. The analysis fails to consider the effects of these activities and improvements along a designated scenic route thereby preventing meaningful evaluation and comparison between alternatives.

The section also fails to mention the potential visual impacts to the recreation areas along the I-5 corridor and the potential impacts to the Angeles National Forest viewshed. The resulting visual impacts along the I-5 route would be visible to many more people than those along the SR-58 Corridor Route.

The analysis of the relative aesthetic and visual impacts of the HST alignment alternatives in the Bakersfield to Los Angeles segment (p. 3.9-17) is confusing and the conclusions lack support. The I-5/Wheeler Ridge alignment is identified as having the lowest aesthetics/visual quality impacts of the alignments in the Bakersfield to Sylmar segment, yet the Wheeler Ridge and Union Avenue alignment options are both identified as having high-contrast impacts related to aerial structures. This section also indicates "the landform in the mountainous areas on the Antelope Valley corridor would be largely unaltered," yet the next sentence indicates "visual contrast related to cut and fill in these areas would therefore be greater than along the I-5 corridor"—an apparent contradiction.

Given the high visual amenity and sensitivity of the I-5 corridor, particularly between the Grapevine to Santa Clarita section that includes scenic national forest lands within the viewshed, it is difficult to justify the conclusion that either of the I-5 alignment options would be superior to an Antelope Valley alignment. As noted above, the visual impact of a HST construction and operation along an I-5 alignment

3.9 Aesthetics and Visual Resources

would likely be visible to more people along non-tunnel segments than with the Antelope Valley alignment.

Although a photo simulation of a potential extensive cut slope in Soledad Canyon is depicted in Figure 3.9-18B, no corresponding photo simulation of visual impact of the HST is provided for the I-5 alignment within the Bakersfield to Sylmar segment. To portray visual impact in a balanced light, such a simulation should be provided in this section depicting a 'worst-case' I-5 scenario.

Bakersfield to Los Angeles Aesthetics and Visual Quality Technical Evaluation

The report is missing the visual simulations for all locations on the route. Of particular interest, however, are the maps of the visual simulation areas showing rather precise route locations. See for example Figure 4.3-1; 4.3-3; 4.3-4; 4.3-5; 4.3-6 and 4.3-8. If this level of route detail and alignment specificity was available for the visual simulations, why wasn't it used for the other disciplines? The document also fails to include photo simulations discussed in the technical report. Figure 4.3-2 on page 39 of the document is blank. The caption states that the figure is of existing conditions and photo-simulations. There are no such figures in the document.

The assessment that both routes have similar types and levels of visual impacts (page 49) is misleading. The impacts associated with the I-5 Tehachapi Corridor would be to State Parks and Recreation areas and lands within the Angeles National Forest that have strict guidelines for visual degradation. This route would also be visible by a higher number of people on a daily basis when compared to the SR-58 route.

O056-8

O056-8 cont.



Comment Letter O056 Continued

SECTION 3.10 - PUBLIC UTILITIES

Table 4.0-1 of the Technical Evaluation grades the HST alignment through the SR-58 alignment through the Antelope Valley as having the lowest impact potential, while the I-5 Tehachapi HST alignment rated a high impact potential with the most conflicts. Table 3.10-2 presents a summary of potential utilities conflicts for project alternatives. A footnote to this table states: "The number of potential conflicts associated with the HST Alternative is provided as a range of potential conflicts. For each region, the HST Alternative generally includes various design options within each segment of the region. These routes serve only to provide a reasonable range of impacts for comparison and do not represent any selection of a preferred option." It should be noted that given the conclusions made in Section 3.10, Public Utilities, that indeed the SR-58 alignment would have the fewest impacts and should consequently be preferred over the I-5 alignment.

O056-9

SECTION 3.11 - HAZARDOUS MATERIALS AND WASTES

General Comments

This section is focused on the topics of hazardous materials and wastes, and does not discuss other hazards listed in CEQA Guidelines Appendix G (VII, Hazards and Hazardous Materials) that may result in significant impacts. The EIR/EIS must be revised to address all hazards listed in CEQA Guidelines Appendix G (VII, Hazards and Hazardous Materials).

For example, issues associated with 'potential impairment or interference with an adopted emergency response plan or emergency evacuation plan' (CEQA Guidelines Appendix G-VII.g) are not addressed here. Although various 'safety' considerations associated with the system alternatives are addressed in EIR/EIS Section 3.2, Travel Conditions, there is no apparent discussion anywhere in the EIR/EIS text of emergency response or emergency evacuation impacts associated with the tunneling requirements of various HST alignments, such a discussion must be included in the text. Neither Section 3.2, Travel Conditions, nor Section 3.13, Geology and Soils, deal with this aspect of the HST system and alignment alternatives and must be revised to address this issue. It would appear that the closest the EIR/EIS comes to dealing with this potentially significant impact of emergency response and evacuation of the HST in a tunnel mode is on page 3.2-22 (Travel Conditions), where it is noted that no HST injuries or fatalities have ever occurred in Japan as a result of a seismic event.

O056-10

The information in Section 3.11 is so broad and preliminary as to make hazardous materials and wastes considerations insignificant in the selection of a system alternative or selection of HST alignments for further consideration. This section must be revised to separate discussion between alignments so that a reasoned analysis of impacts can be undertaken.

Figure 3.11-1, Hazardous Material and Waste Locations in the Study Area. Table 3.11.3-1, Potential Hazardous Material and Waste Sites Comparison—Modal and High-Speed Train Alternatives.

Due to the statewide scale of the figure, it is difficult to correlate the mapped sites with the numbers of identified sites in the table, for the Bakersfield to Los Angeles region (and Bakersfield to Sylmar segment). For ease of reference and consistency with other sections of the EIR/EIS, a Bakersfield to Los Angeles region base map is needed in the EIR/EIS in order to facilitate a comprehensive analysis of potential impacts.

Appendix 3.11-A, Results of Hazardous Materials Database Searches. An SPL Listing site is identified for the I-5 Grapevine Corridor (via Union Avenue Corridor) that does not appear on Figure 3.11-1,



Comment Letter 0056 Continued

3.11 Hazardous Materials and Wastes

Hazardous Materials and Waste Locations in the Study Area. Consequently, Figure 3.11-1 must be revised to include this listing.

There is relatively little to distinguish between the alignment alternatives in the Bakersfield to Los Angeles segment in terms of the number of sites identified. As a result, the identification of alignments in this segment with 'greatest potential for impact' and 'least potential for impact' is not particularly meaningful. Additionally, in order to ascertain and compare alignment impacts, the EIR/EIS must provide a discussion as to the disposition of tunneling wastes associated with the I-5 alignment. This information is imperative to the analysis to determine comparative impacts.

Hazardous Materials/Wastes Technical Evaluation, Bakersfield to Los Angeles Region

2.3, Hazardous Materials Used in Operation, Maintenance, and Construction of the Alternatives. This section indicates that a 'qualitative review' of these impacts will be included in the Program EIR/EIS. However, Section 3.11 discusses only the impacts of existing or potential hazardous materials and wastes sites upon construction, operations, and maintenance activities (page 3.11-3). Hazardous materials used must be identified or characterized in the EIR/EIS.

It is apparent after reviewing the tabulated breakdown of sites in the NPL/Superfund, SPL Listings, and SWLF Listings that a single recorded site can fall into one or more listing categories. This must be clarified in EIR/EIS Section 3.11 and Appendix 3.11-A with regard to the quantification of sites.

The information in Table 4.0-1, Detailed Analysis/Comparison Table, and the summary in Section 4.3 for the HST Alternatives are helpful in understanding the nature, type, and location of hazardous materials and waste sites within this segment. Section 3.11, Hazardous Materials and Wastes, must be revised to include this information to facilitate the review.

0056-10 cont.

SECTION 3.12 - CULTURAL AND PALEONTOLOGICAL RESOURCES

This section presents a potentially insufficient assessment of cultural resources impacts by failing to clearly factor in the percentage of each HST alignment alternative that has not been surveyed. In so doing, the estimation of the number of cultural sites potentially impacted can be very misleading. Also, use of a methodology for assessment of historic impacts based primarily upon the percentage of each alternative corridor that passes through areas that originally developed in specific predefined historic time periods is inconsistent with common practice. This provides a poor substitute for preliminary surveys for historic structures and/or quantification of the number of sites listed on the National Register of Historic Places (NRHP) that may be impacted.

B. Method of Evaluation of Impacts

Archaeological Sites and Traditional Cultural Properties

Traditional Cultural Resources Properties concerns seem to be focused on the I-5 Route between Grapevine and Frazier Park. There are known traditional properties along the route. Cultural resources along the I-5 route and impacts to Fort Tejon and other sites could be of concern. Even indirect impacts to Fort Tejon, even indirect would be severe as it is a NRHP site as well as a State Park and State Historic Landmark.

The methodology for determining low medium or high impacts is based on "known" information. Thus, if an area has been subjected to extensive surveys, there is a greater potential to have a high impact. This might not be the case in the real world. Portions of the Tejon Ranch have not been surveyed. A more appropriate way to evaluate would be to have a number indicating the percent of the route that has been surveyed. Using this number with the number of sites in an area would be a better method for comparison and must be included within the analysis.

Historic Structures

This analysis is inconsistent with common practice methodology. The methodology states that any developed areas might have impacts based on nothing other than being built more than 50 years ago. It specifically states, "Specific structures from the historic period were not identified for this program level analysis. Instead, the percentage based on linear miles of each alternative corridor that passed through areas that originally developed in specific predefined historic time periods (before 1900, 1900 to 1929, and 1930 to 1958) was determined from historical maps, aerial photographs, and local planning documents of the history of the region." (p. 3.12-5).

0056-11



Comment Letter 0056 Continued

3.12 Cultural and Paleontological Resources

Again using a methodology that documents what percentage of a route has been surveyed, what types of sites have been identified and what number of existing NRHP sites are present on a route would be a more comparable approach to an environmental analysis and consequently the EIR/EIS must incorporate this approach and the EIR/EIS be revised accordingly. Additionally, neither the technical report nor the EIR/EIS section addresses the settlement of Ft. Tejon or Lebec as occurring in the 1850s. How can Ft. Tejon, which is listed as a State Historical Monument, be omitted from the discussion of historical resources in Kern County? Guidelines Section 15126.2(a) states: "...the lead agency should normally limit its examination to the changes in the existing physical condition in the affected area as they exist at the time the notice of preparation is published." How can an impact analysis discuss the location of Ft. Tejon in relation to the proposed I-5 alignment if Ft. Tejon has not been addressed in the existing setting section of the document? The EIR/EIS must be revised to thoroughly address the importance of Ft. Tejon in the region. Given the lack of information with regard to Ft. Tejon and its importance to the region, the conclusions with regard to impacts from the HST on Ft. Tejon along the I-5 alignment are suspect and must be revised.

3.12.2 Affected Environment

A. Study Area Defined: Area of Potential Effect (APE)

There is no reference in the rest of the section on where the APEs (study areas) are defined for the routes. Does the I-5 corridor have the same width the entire length? What are the impacts to SR-58/Soledad Canyon? The document states (page 3.12-6) that the APE for cultural resources for the proposed HST Alternative is as follows:

- 500 feet (152 m) on each side of the centerline of proposed new rail routes where additional right-of-way could be needed.
- 100 feet (30 m) on each side of the centerline for routes along existing highways and railroads where very little additional right-of-way would be needed.
- 100 feet (30 m) around station locations.

There is no indication that similar areas were examined for each alternative. It may be possible that one route was primarily analyzed at 100 feet and another was done at 500 feet. Clarification on this issue is required for analysis purposes.

3.12 Cultural and Paleontological Resources

3.12.4 Comparison of Alternatives by Region

C. Bakersfield to Los Angeles

High-Speed Train Alternative

Based on the text (page 3.12-22), there is a high potential for unidentified buried resources along the I-5 route. These resources could have significance to Native American Groups and may be difficult to mitigate. There are also NRHP sites along this portion of the route that could be affected by construction activities. The EIR/EIS must be revised to reflect these resources and the potential impacts.

The SR-58/Soledad route has a low potential for archaeological sites and there is little mention of Native American concerns. The corridor through the Antelope Valley has the potential to impact 68 recorded archaeological sites in an undefined corridor width. (Note: The Technical Report indicates that there are only 20 sites.) The report states that most of the sites in the Antelope Valley corridor are historic trash scatters along the railroad (these would be unlikely to be NRHP eligible). The EIR/EIS must be revised to clarify the above noted discrepancies.

High-Speed Train Alignment Comparison

General Comments Pages 3.12-22 and -23)

This section is conflicting and it is difficult to ascertain what is being said. The first paragraph discussion addresses archaeological sites and then it says that there are historic trash scatters along the rail corridors in the Antelope Valley. The section must be revised to discuss potential impacts associated with the I-5 alignment and another paragraph(s) to discuss the potential impacts of the SR-58 corridor alignment option. As written, it is difficult to ascertain what impacts should be assigned to which potential alignment and consequently the EIR/EIS must be revised to clearly differentiate between alignments. The comparison of the two alignments may be adequate, but is only useful if there are two separate discussions preceding the cumulative discussion, of the I-5 and SR-58 alignments. For instance, the I-5 corridor has a number of historic structures - some which are on the NRHP and some Historic Landmark Sites. The EIR/EIS must be revised to clarify the above noted inconsistencies.

Generally, it is difficult to determine what has been studied, what the widths of study are, whether they are the same width between the two alternative alignments. There is no comparison provided. This, is coupled with the fact that there is no way to determine if the lack of sites on a portion of the route is due to little or no survey coverage or the true lack of archaeological materials. The EIR/EIS must expand this

0056-11 cont.

0056-11 cont.



**Comment Letter 0056 Continued**

3.12 Cultural and Paleontological Resources

discussion and address which portions of the routes were not analyzed due to a lack of surveys and for comparison purposes.

**Cultural Resources Technical Report**

Figure 2.2-1 (p. 15), Approximate Location of Native American Groups, In Project Region at the Time of European Contact. Based on expansive tribal territories, this map must be revised to include the tribes west of the Tatavium (Emigdiano Chumash?) and north of the Kitnemuk.

Page 32 indicates that response from Native American groups has either not been received, or not been sent out. This appears to be an unanswered question left unresolved in the technical report and must be addressed.

**Section 3.3 - RANKING POTENTIAL IMPACTS TO CULTURAL RESOURCES BY ALTERNATIVE.**

**Comment: Table 4.0-1, Detailed Analysis/Comparison Table: Impacts to Cultural Resources Bakersfield to Los Angeles.** The High-Speed Train Alternative lists the Antelope Valley as having 120 archaeological sites. The text on page 40 indicates that there are 20 sites. Based on addition in the EIR/EIS the 20 sites would appear to be the correct number.

**Comment: Section 4.3.1, Alignments.** The percentage of surveyed area within the Antelope Valley Corridor (50% page 40) may explain the higher number of sites and the higher number of sites per mile (page 40). If the percentage of the Corridors surveyed were included in the calculations used to document all segments, it would be easier to assess the information presented in the Technical Evaluation. Another useful tool would be the number of NRHP listed and eligible sites, which should be provided for analysis. Several sites in the SR-58 and Antelope Valley segments are not eligible for NRHP and thus their significance to the count is diminished.

**Bakersfield to Los Angeles Paleontological Resources Technical Evaluation**

**4.3.1 Alignments**

None of the sections discuss tunneling impacts on paleontological resources, or provide a comparative evaluation of alignments in this regard. This is one of several issue areas in the EIR/EIS where the subsurface impacts could be more severe than surface impacts. Based on the current information, it is impossible to make a comparative finding of impact, other than the fact that the I-5 Tehachapi Corridor has more miles of tunneling than the SR-58/Antelope Valley/Soledad Canyon Corridor. Consequently, the EIR/EIS must be revised to provide this analysis.

0056-11 cont.

**SECTION 3.13 - GEOLOGY AND SOILS**

Table 3.13-1, Ranking System for Comparing Impacts Related to Geology/Soils/Seismicity, page 3.13-2, is misleading. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA. As an example, with regard to the issue of "Difficult Excavation" the impact rating is high, medium, or low based upon percentage of length. Therefore, if one had to tunnel through solid bedrock for less than 10 percent of an alignment, the resulting impact would be low. Whereas, if an alignment had a longer length of excavation, even with less difficult terrain or soil features, the ranking would be high.

The ranking system places too much emphasis on length, as opposed to truly how difficult the excavation would be based upon true determining factors such as soil, geologic formations, slope, etc. As an example, Table 3.13-A-4 concludes that the I-5: Tehachapi Corridor is ranked "L"- for low impact. This conclusion is illogical. Considering the amount of excavation, the type of geological materials and the tunneling that would be necessary for this alignment, the conclusion that impacts would be low defies logic.

Even if the percentage of length were an appropriate evaluator (which it is not), the Biological Resources Technical Evaluation, Table 1.2-1 indicates that the length of miles of tunneling for the I-5 Tehachapi corridor is 22.93 miles. One would also assume that this will be difficult excavation, given the geologic formations at this location, as described in the *Final Report - A Comparative Analysis of Tunnel Construction Times, Costs and Risks Associated with the choice of High Speed Rail Tunneling Alignment between Los Angeles and Bakersfield*, Transmetrics and Geodata, January 31, 2003. This report clearly discusses the geological difficulties with the I-5 alignment.

*"Metamorphic to granitic rock types shall be encountered. Tunneling shall intersect a very tectonically disturbed zone. Major regional faults are (i.e., Garlock and San Andreas systems) several hundred meters wide, while other important faults (e.g., Pinto thrust zone, Piastoria fault) and a certain number of minor shear zones will be crossed. Poor to very poor conditions can be anticipated through these zones, with a high potential for ground instability phenomena. Ground squeezing could occur in zones of low rock mass strength to lithostatic pressure ratio, while wedge-like instabilities could occur as a consequence of the blocky nature of the rock mass. Zones bounded by successive fault zones are, on average, expected to be quite disturbed due to significant, though variable, fracture intensity."*

Table 1.2-1 also indicates that with the SR-58 Corridor there is only 6.19 miles of tunneling on what is assumed to be difficult excavation. Yet the I-5 alternative is ranked "Low Impact" and the SR-58 alignment is ranked "High Impact" even with a lesser length of tunneling? This conclusion simply defies logic. Clearly one section of the EIR/EIS is completely incongruous with other sections of the EIR/EIS. The analysis tying "difficult excavation" to length of tunneling grossly understates the severity and significance of the impacts.

0056-12

Comment Letter 0056 Continued

3.13 Geology and Soils

The ranking system also rates the impacts of slope instability on oil and gas fields with percentage of length. More real determining factors such as topography and soils should be considered when evaluating impacts to slope stability in oil and gas fields. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

The revisions to the EIR/EIS must incorporate and include the analysis contained within *Final Report - A Comparative Analysis of Tunnel Construction Times, Costs and Risks Associated with the choice of High Speed Rail Tunneling Alignment between Los Angeles and Bakersfield*, Transmetrics and Geodata, January 31, 2003. This report concludes: "Although the amount of tunneling work involved in the I-5 and the AV alignment are almost the same, be it the 2.5% grade or the 3.5% grade option, the ground conditions along the AV [alignment] are relatively more favorable and hence involve less construction risks, financial risks and contractual risks." The EIR/EIS should not make such unsupported statements given the information provided in the *Final Report - A Comparative Analysis of Tunnel Construction Times, Costs and Risks Associated with the choice of High Speed Rail Tunneling Alignment between Los Angeles and Bakersfield*, Transmetrics and Geodata, January 31, 2003 report.

The Geology and Soils section is confusing at best. It is not clear what locations are associated with the high-speed rail or high-speed rail route alternatives. For example, Page 3.13-11 (5<sup>th</sup> paragraph: High-Speed Train Alternative discusses the I-5 Tehachapi corridor, from Wheeler Ridge to San Fernando and the Soledad Canyon Corridor. Also on this page (6<sup>th</sup> paragraph): "The alignment would be designed to cross these faults at grade. Because the impact is expected to be nearly equivalent for these alignments, there is no significant difference between the I-5, SR-58, SR-138 and Wheeler Ridge alignments with regard to fault crossings." The discussion of the High-Speed Train Alignment Options Comparison does not indicate which locations of this alignment option are being referred to. Nowhere in the section does it state what improvement locations are associated with each high-speed rail alignment. Appendix Table 3.13-A-3, Summary Table, Geology and Soils, Bakersfield to Los Angeles, does not differentiate which improvement location is affiliated with each high-speed train alignment. Therefore it is impossible to discern what impacts are attributable to each high-speed train alignment. Additionally, the improvement locations should have titles/names that are the same throughout the entire EIR/EIS. Many sections have different names for what appears to be the same improvement location. Additionally in some EIR/EIS sections the "Soledad Canyon Corridor" is attributed to the High-Speed Train Option alternative and in this section is it attributed to the High-Speed Train Alternative. If this information is not consistent throughout the EIR/EIS, one could ask why the discussion of SR-138 is included, since it is not addressed elsewhere in the EIR/EIS. Additionally SR-138 is noted as an improvement location on Table 3.13-A-3. Why would it be discussed in the text if it isn't listed as a part of the table?

3.13 Geology and Soils

Table 3.13-2, Summary of Geology Potential Impact Rankings by Alternative and Segment, is too vague and combines the High-Speed Train and High-Speed Train Alignment Options into one HST category. Each alignment of the HST should be clearly differentiated in the table. By combining impacts, this table is misleading and does not give the decision makers a sense of the relative impacts on each of the High-Speed Train route alternatives.

Lastly, there is no clear discussion of CEQA significance thresholds for discussion and analysis purposes.

The evaluation methods are of concern because they are based upon the "percentage of length" of tunneling, which is a meaningless measure when compared to more realistic criteria such as geologic conditions, slope, and topography. The geologic risks cited in *Final Report - A Comparative Analysis of Tunnel Construction Times, Costs and Risks Associated with the choice of High Speed Rail Tunneling Alignment between Los Angeles and Bakersfield*, Transmetrics and Geodata, January 31, 2003 must be addressed. The section is so unclear as to which improvement locations are associated with each alignment, the necessary evaluation of potential impacts required of the decision makers prior to choosing a preferred alignment will not be possible, as written.

O056-12 cont.

O056-12 cont.



Comment Letter 0056 Continued

SECTION 3.14 - HYDROLOGY AND WATER RESOURCES

General Comments

Groundwater in the mountainous regions of the Bakersfield to Sylmar segment, between the points represented by the San Gabriel and Tehachapi Mountains, is highly variable, affected by fracture permeability in rock units and local alluvial valleys that are relatively restricted in their extent. This is the area where the largest expanse of tunnels on the entire project is located. This type of impact has the potential to be extremely significant yet there is little discussion of this issue. It is likely that little in the way of mitigation could be developed but sufficient information is not presently available to allow meaningful evaluation and comparison of impacts.

The information that is presented is of little value. The use of the total number of linear feet of streams that may be impacted is an inappropriate measure of impact significance. The text indicates that the I-5 corridor has a potential to impact 30,000 linear feet of streams, while the SR-58 route would impact 60,000 linear feet. The report does not mention anything related to the types of streams, flow rates, and length of downstream impact. It does not contain a description of the methodology used to calculate the impacted areas nor where the impacts are located. An appropriate number for analysis might be stream crossings (perennial vs. intermittent or ephemeral). This impact could be quantified and could result in a number that could be calculated into acres.

This section also includes some inconsistencies and errors as documented in the specific comments that follow.

B. Method of Evaluation of Impacts

Quantitative Assessment (page 3.14-2 and -3)

Acreeage of surface waters and linear feet of surface waters measurement methodology has no relevance (second bullet on page 3.14-2). Measuring the number of linear feet of streams within the analysis corridor has no value unless the number is for downstream impacts only.

D. Hydrology and Water Resources by Region

Bakersfield to Los Angeles

Groundwater (p. 3.14-7). Groundwater in the mountainous regions between the points represented by the San Gabriel and Tehachapi Mountains is highly variable, affected by fracture permeability in rock units and local alluvial valleys that are relatively restricted in their extent. This is the area where the

3.14 Hydrology and Water Resources

largest expanse of tunnels on the entire project is located yet little information is presented to allow meaningful assessment of potential impacts.

Logs for wells placed in the lowlands of the Castac Valley basin indicate that ground water levels have fluctuated greatly over time in response to wet and dry precipitation cycles. Historically, ground water levels in the Castac Valley basin, as well as Tejon (Formerly Castac) Lake, tend to fill up following wet winters and decline after years of drought. Springs are common within the canyons and mountainous portions of the site, and these are also greatly influenced by seasonal and climatic cycles.

The level of Castac (now Tejon) Lake has historically varied from completely dry to its historic high at an elevation of 3,505 feet above Mean Sea Level. The watershed that is tributary to Tejon Lake consists of 39,855 acres or 62.3 square miles. Tejon Lake was formed approximately 10,000 years ago when surface drainage from Cuddy Canyon was directed away from Hungry Canyon and towards Grapevine Canyon, northwest of present day Tejon Lake. Over time approximately 80 feet of sediment accumulated in the upper reaches of Grapevine Canyon, when combined with the extensive movement along the Garlock Fault, produced a depression capable of capturing flows prior to entering the Grapevine region. Thus, Tejon Lake was formed as stream flow carrying sediment eventually ponded behind this alluvial fan.

There is a confining layer at about 20 to 30 feet below the ground surface in Castac Valley, with a free aquifer above that which is hydraulically connected to Tejon Lake. Ground water levels measured in boreholes drilled in this area indicate shallow ground water is present at depths ranging from 5.5 feet to 20 feet. Rotary wash borings drilled by Allan Seward Engineering Geology, Inc. encountered ground water in this valley as high as 1.7 feet below the surface.

As currently proposed, the I-5 rail alignment alternative would travel across Grapevine meadow between I-5 and Tejon Lake. At a point just past the Department of Water Resources maintenance road the track would enter into the hillside east of Grapevine Creek. Earthwork activity needed to construct the tunnel shafts would require tunneling into the hillside and stockpiling and transport of soil could cause significant water quality effects on Tejon Lake, Grapevine Creek, and associated meadows. Tunneling would likely require dewatering, given the shallow depth to groundwater in the vicinity of Tejon Lake, yet no analysis of these issues has been provided, even at the most cursory of levels. These types of potential impacts could be extremely significant and currently little discussion is presented to allow meaningful analysis and comparison across alternatives.

O056-13

O056-13 cont.



Comment Letter O056 Continued

3.14 Hydrology and Water Resources

3.14.4 Comparison of Alternatives by Region

C. Bakersfield to Los Angeles

High-Speed Train Alternative (page 3.14-15)

The number of linear feet of impacts to streams is a meaningless number in this analysis. The text indicates that the I-5 corridor has a potential to impact 30,000 linear feet of streams, while the SR-58 route would impact 60,000 linear feet. The report does not mention anything on the types of streams, flow rates, length of downstream impacts, nor does it contain a description of the methodology used to calculate the impacted area nor where the impacts are located. An appropriate number for analysis might be stream crossings (perennial vs. intermittent or ephemeral). This impact could be quantified and could result in a number that could be calculated into acres.

The discussion does indicate that the SR-58 HST alignment would not encroach on any lakes, whereas both of the I-5 Tehachapi alignment(s) would potentially encroach on 18 ac (7 ha) of lakes including Castac Lake in the Castaic Valley of the Tehachapi, and Upper Van Norman Lake south of the San Fernando Pass.

The document mentions that it is impossible to determine which alternative would affect more groundwater resources. At the Program EIR level, however, the amount of tunneling could be compared and used as an indicator of the potential significance of this effect for each alignment

Hydrological Resources Technical Report

Section 2.2.2, State Regulations. This section does not reflect the latest CDFG Stream Alteration regulations.

Section 2.3.1, Lakes. "For the HST Alternative, the majority of acreage of lakes occurs along the undeveloped portions of the SR-58/Antelope Valley and I-5/Grapevine routes." However, this is in error, as SR-58 has no lakes (see Table 2.3-1, Summary of Affected Area for Hydrology and Water Quality).

Section 2.3.2, Streams. This section states essentially the same discussion as the section on lakes above. It indicates that..."For the HST Alternative, the majority of acreage of lakes occurs along undeveloped portions of the SR-58/Antelope Valley and I-5 Grapevine routes. This is in error, as the SR-58 Corridor has no lakes and the section is discussing streams.

3.14 Hydrology and Water Resources

Section 2.3.4, Groundwater. There is no discussion of aquifers in the section other than to mention that there are three major aquifer types in the region. The groundwater component of the project might be a key differentiating section between the tunneling associated with the I-5 Corridor and the tunneling on the SR-58 Corridor. The locations of the aquifers should be shown in an exhibit to give meaning to the location and the possible impacts due to tunneling.

Table 2.3-1, Summary of Affected Area for Hydrology and Water Quality. This table is meaningless without providing information as to how these impacts were assessed. It is misplaced and should be included in Section 3.

Page 16 (3rd paragraph): "Additional potential impacts to hydrology and water quality include increased/decreased runoff and stormwater discharge for alteration in the amount of paved surfaces, increased/decreased contribution of automotive-based non-point source contamination, impacts of groundwater discharge or infiltration" should be made into bullet points and included in the preceding paragraph of bullet points.

Page 17: Groundwater Impacts. No rationale is given as to why, if a project is located in an area of 401 acres or more of a groundwater basin that it would necessarily create an impact. An impact would only be created if the project were impacting the basin by interference or withdrawal. There is no rational basis for this analysis of groundwater impacts. Please revise with substantiated evidentiary impacts for groundwater.

Page 18 (2nd paragraph): Differentiate conclusions associated with HST between I-5 Corridor and SR-58 alignment option. (4th paragraph): The paragraph requires a conclusion per CEQA if the impacts are potentially significant. It is not enough, to merely state the one alternative has fewer acres than another. A definitive statement regarding potentially significant impacts must be made.

Page 19 (1st paragraph): The paragraph requires a conclusion, per CEQA, if the impacts are potentially significant. It is not enough, to merely state that one alternative has fewer acres than another. A definitive statement regarding potentially significant impacts must be made. (3rd paragraph): The paragraph requires a conclusion per CEQA if the impacts are potentially significant. It is not enough, to merely state that one alternative has fewer acres than another. A definitive statement regarding potentially significant impacts must be made.

O056-13 cont.

O056-13 cont.



Comment Letter 0056 Continued

SECTION 3.15 - BIOLOGICAL RESOURCES AND WETLANDS

General Comments

Confidence in the accuracy of the assessment of biological resources and wetlands impacts in the Bakersfield to Sylmar segment is lacking due to inherent weaknesses in the database coverage and methodology used in the EIR/EIS. These flaws are described in the specific comments that follow.

Specific Comments

Study Area

The biological resources study area was 1,000 feet in urbanized areas, 0.25 mile in undeveloped areas, and 0.50 mile in sensitive areas. The criteria for "urbanized," "undeveloped," and "sensitive" is not defined in the EIR/EIS. The EIR/EIS goes on to state that the study area in the Bakersfield to Los Angeles region was 0.5 mile, which was supposed to be used in sensitive areas. The document further states that the broader study area was used due to the Tehachapi mountain crossings. The urbanized area study criteria does not appear to have been used in the highly urbanized area of Los Angeles. The use of each buffer area differed from segment to segment based upon the judgment of the technical report team.

Data Sources

The data used to compare the potential impacts to biological resources in the Draft EIR/EIS was limited to available digitized data that was dated or inherently unreliable. These data sources are described below.

Data sources used to determine which sensitive vegetation communities, and special-status plant and wildlife species may occur within the buffer zone were limited to the California Gap Analysis and California Natural Diversity Database (CNDDDB). It should be noted that U.S. Fish and Wildlife Service (USFWS) designated critical habitat was reported for other HST sections, but not for the Los Angeles-Bakersfield section. Critical habitat for the California gnatcatcher, the California red-legged frog, and the arroyo toad occur in the vicinity of this study area. In particular, the segment paralleling Interstate 5 in the Tehachapi Mountains passes through critical habitat designated for the California condor. Additionally, Appendix 3-15C states that the California Native Plant Society (CNPS) database was also not included in the analysis since digital GIS data was not available.

The University of California, Santa Barbara in coordination with the United States Geological Survey (USGS) Biological Resources Division, conducted California Gap Analysis - The California GAP Analysis project. The maps were created through photo interpretation of digital satellite data guided by overlays

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3.15 Biological Resources and Wetlands

of existing vegetation maps, land use maps, and forest inventory data. Specific standards for resolution and scale, accuracy, and format were set. However, it should be noted that no field verification was conducted. The lack of field verification is a flaw in the biological section as many of the databases relied upon by the authors are unreliable, have data gaps, and do not always represent current habitat conditions.

This data set was used in the EIR/EIS to determine what sensitive vegetation communities exist within the buffer area. Sensitive vegetation communities include coastal sage scrub, willow riparian woodland, and alluvial fan sage scrub that could require mitigation for impacts under CEQA. The maps are expected to provide a regional context for vegetation and habitat, but may not provide information at a suitable scale for making alignment recommendations or decisions.

CNDDDB - The CNDDDB database is an inventory of special-status habitats, plants, and wildlife. The CNDDDB records are submitted by biologists who observe the species during surveys, or are historical records. Therefore, the areas that have been surveyed for several projects or large projects, or are considered biologically sensitive, would have more recorded occurrences of sensitive species. In other words, current or draft versions of HCP's in the area, or other larger project documents, should have been reviewed and incorporated. Consequently, the EIR/EIS must be revised to incorporate this information.

Each occurrence in the CNDDDB database is recorded on a USGS 7.5-minute quadrangle, which encompasses an area of 49 to 70 square miles. In many segments of the HST alignments, an area this large would include several habitat types and elevations. The CNDDDB database lists the habitat type for each species, and often includes a detailed description of its location, however, it does not appear that these factors were taken into consideration during the preparation of the EIR/EIS.

As shown in Figure 3-15-05, the CNDDDB GIS data contains large polygons of different shapes that apparently depict Threatened and Endangered species habitat. How these polygons are designed based upon submitted records is not explained in the EIR/EIS.

The EIR/EIS also uses the Missing Linkages report as its basis for analysis of impacts on movement corridors/habitat linkages. This particular report is not based upon any measurable or otherwise empirical study or studies; rather, it is a very broad-based analysis, across the entire state, of where habitat linkages could be or might be if current land uses were not prohibitive.

In conclusion, the use of unreliable data with unknown or speculative methodology, the failure to field verify data sources, and the failure to use existing/extant data and reports where available, are flaws in the EIR/EIS. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

0056-14 cont.



Comment Letter O056 Continued

3.15 Biological Resources and Wetlands

Jurisdictional Waters

The data used to calculate the amount of jurisdictional waters resources within the buffer area was limited to the National Wetland Inventory maps and USGS topographic maps. It should be noted that different sources of data were used in the analysis of the various segments. For example, data sources used in the San Diego to Inland Empire segment included Thomas Brothers Guide maps and USFWS vernal pool maps.

**National Wetlands Inventory Maps.** The U.S. Fish and Wildlife Service USFWS created the NWI maps, which are provided on a USGS 7.5-minute quadrangle base. The metadata provided with the maps clearly states that the NWI does not show all wetlands or riparian areas since the maps are derived from aerial photo-interpretation of maps of varying scale and quality, and dated between 1971 to 1997. These aerial photos include older 1970s-era black and white photography at a scale of 1:80,000 and more recent color infrared photography. The maps are inventoried using different techniques depending upon the interpreter, and no field verification was conducted. The USFWS clearly states in the metadata that information provided by the NWI is limited and users should not rely solely on the NWI maps, but consult other information, such as soil survey reports and local and state government wetland information.

Additionally, 24 of the quadrangles that comprise the Los Angeles to Bakersfield study area were not available. Therefore, the final analysis does not include wetland data for approximately one-half of the study area. Although this statement is acknowledged by the EIR/EIS, this is a major concern with respect to the identification of wetland areas or potential wetland areas, particularly with respect to impact analysis.

**USGS Topographic Maps.** According to Appendix 3.15-C, a manual review of USGS topographic maps were used to calculate the linear feet length of perennial, intermittent, and ephemeral drainages within the study area. USGS maps are based upon information compiled in the 1960's and 1970's with some updates in the 1980's.

Reporting potential impacts to streambeds in linear feet is not appropriate since these impacts are permitted by resource agencies based upon acreage of impacts. The different streambed types were reported in the Technical Report, but not used in the EIR/EIS alternatives comparison table, which includes all streambed types as "non-wetland waters."

Because the NWI maps included any ponds, rivers, and lakes that were visible in the aerial photographs used, many of the waterbodies within the buffer areas are expected to have been counted twice in the

3.15 Biological Resources and Wetlands

analysis. They would have been counted first in acre-feet from the NWI maps and then in linear feet from the USGS topographic maps.

In conclusion, the use of limited and unreliable data, the lack of field verification and surveys, and the use of inappropriate analysis of existing water resources and impacts on these resources are flaws of the EIR/EIS. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

3.15.1 Regulatory Requirements and Methods of Evaluation

B. Method of Evaluation of Impacts (page 3.15-1 and -2)

Wetlands were determined from NWI maps. The report admits that the information was incomplete in some areas, but does not specifically spell out where areas of deficiency occur. The document states that the collection of detailed information should be conducted at the next phase of analysis.

No field studies were completed and the potential existence of certain biological resources is based on database information. That means that if a resource were somewhere within a search area, the species or vegetation type would be represented in the data. This could over represent impacts in some areas if there is a high biological diversity in the area. The State Route 58 (SR-58)/Soledad Canyon Route is such an area with multiple zones that could or could not contain sensitive species.

The document states that "...the identification of a potential impact on a specific resource is intended to be conservative and in some instances may be an overstatement, because neither habitat that is sensitive or species of concern may be found in or near the footprint of the proposed corridor or actual alignment." (page 3.15-3) Again, the document recommends that this analysis be conducted at a later level of environmental review.

3.15.2 Affected Environment

The study area for the Interstate 5 (I-5) corridor is defined as 0.5 mile on either side of the highway and rail corridors and around stations (page 3.15-4). We presume this is for both the I-5 and SR-58 segments. This number potentially over-inflates impacts. It is impossible to tell if the overrepresentation is equal on both routes due to the different nature of the terrain and routes.

The use of a 0.5-mile "potential impact zone" may be appropriate for movement corridor analysis, but is excessive for potential impacts on specific vegetation types and plant or animal species. The document should provide justification for a 0.5-mile "potential impact zone" for special-status species and/or

O056-14 cont.

O056-14 cont.



Comment Letter O056 Continued

3.15 Biological Resources and Wetlands

habitats, particularly since the ROW alignment is known with specificity to the lead agency, which has detailed engineering drawings of the I-5 and SR-58 alignments.

3.15.4 Comparison of Alternatives by Region

C. Bakersfield to Los Angeles

The High-Speed Train Alignment Option Comparison states that the SR-58/Soledad Canyon route would have a slightly greater potential for impacts on biological resources than for the I-5 route. This determination appears to have been based upon the EIR/EIS's conclusions that the SR-58/Soledad Canyon alignment had a higher total number of special-status species (using inadequate data) and more linear feet of waters of the U.S. (inappropriately calculated) than the I-5 alternative. It was also based upon the assumption that the I-5 alignment contained more tunneling, thus fewer direct impacts on habitats, than the SR-58/Soledad Canyon alignment. The EIR/EIS states that special-status species include federal and state listed Threatened and Endangered species, Species of Special Concern, and CNPS 1B listed plants. As the names and status of these species are not provided, it is not possible to determine which alignment has the highest number of state and federally listed species. Threatened and Endangered species have a higher level of sensitivity and protection than Species of Special Concern and CNPS 1B listed plants. Also, the EIR/EIS and technical report understate the number of special-status plant and animal species associated with the I-5 alignment. There are several special-status species (e.g., Tejon poppy, Comanche Point layia, Fort Tejon woolly sunflower, Piute Mountains navarretia, bluntnosed leopard lizard, California horned lizard, Tehachapi slender salamander, two-striped garter snake, burrowing owl, Cooper's hawk, golden eagle, prairie falcon, loggerhead shrike, willow flycatcher, and tri-colored blackbird) that are known to occur in the region of this alignment that were not addressed.

Based on the information provided, it is impossible to make any kind of meaningful comparison. On page 3.15-31 the document states that alignments could be adjusted to reduce impacts. This would be the case in most instances. The report also states that the broad range of information may not accurately correspond to actual field conditions.

The EIR/EIS concludes that more impacts to jurisdictional waters and wetlands would occur along the SR-58 Soledad Canyon route because the segments of the I-5 alignment that involved tunneling were assumed to avoid all impacts to jurisdictional waters and wetlands. However, potential impacts due to removal and deposition of large amounts of soil due to the tunneling, as well as the impacts due to dewatering, could occur. These potential impacts must be addressed in the EIR/EIS. The comparison of linear feet of potential streambed impacts is meaningless since impacts are reported in acres and the width of streambeds and riparian corridors differ significantly. Additionally, there is a huge unexplained

3.15 Biological Resources and Wetlands

disparity between the linear feet of non-wetland waters (streambeds) reported in the Biological Resources section and the linear feet of streams reported in the Hydrology and Water Resources section. However, both sections reference 1:24,000 scale (7.5 minute) USGS topographic maps as the source of data.

LEDPA for Waters of the U.S.

Because construction of the HST project will involve temporary and permanent fills in waters of the U.S., issuance of a permit under Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers (Corps) will be required. In accordance with the Clean Water Act, the Corps "...cannot permit a discharge of dredged or fill material into waters of the U.S. if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." The least environmentally damaging practicable alternative is known as the LEDPA.

When an individual 404 authorization is requested from the Corps, the LEDPA is determined through the preparation of an alternatives analysis. The alternative analysis must "rigorously explore and objectively evaluate" all reasonable and practicable off- and on-site alternatives capable of achieving the purpose of the proposed activity. Practicable is defined by cost, technical, and logistic factors. The EIS/EIR should identify alternatives that would ultimately be consistent with the LEDPA that will be required by the Corps.

Additional Comments

Significance criteria for biological resources - One of the criteria stated in this section is, "Potential loss of a substantial number of any species that could affect the abundance or diversity of that species beyond the level of normal variability." This is a very ambiguous significance threshold; how is "normal variability" defined? What standard is being used?

Section C of 3.15.2, for the Bakersfield to Los Angeles segment, lists conservation plans that occur or would apply to this alignment. This section should be updated to include the Tejon Condor HCP that is currently in draft form. This HCP could be a constraint to the I-5 alignment.

Biological Resources and Wetlands Technical Report

Biological Resources General Comments

The specific starting point for the Bakersfield to Los Angeles Segment of the report does not start at the same location in Bakersfield for each of the three routes. The lack of a common start point could have a localized difference on effects in the Sacramento to Bakersfield Segment Studies.

O056-14 cont.

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Comment Letter O056 Continued

3.15 Biological Resources and Wetlands

The Biological Resources section of the EIR/EIS compared the number of sensitive species that could occur within each alignment. Twenty-three (23) species were recorded for the SR-58/Soledad Canyon alignment and thirteen (13) to fourteen (14) species were recorded for the I-5 alignment, depending upon the segment chosen (Union Station or Wheeler Ridge). However, both of the alignments are divided into several segments that were analyzed separately in the Technical Report. This resulted in multiple counts of the same species for each alignment. When analyzed by alignment, the potential impacts to special-status species is summarized below:

	I-5 Alignment		SR-58/Soledad Canyon
	Union Station Segment	Wheeler Ridge Segment	
Special-Status Plants	5	3	11
Special-Status Wildlife	8	9	9
Total Number of Special-Status Species	13	12	20

The analysis of potential impacts to special-status species in the EIR/EIS is limited to a comparison of the total number of species, which as demonstrated above, is reduced when the entire alignments are compared rather than segments. However, a more suitable analysis would be a comparison of potential impacts to the most sensitive species, indicated by its state and federal status and the level of probability for it to occur. A species may be protected at different levels at the state and federal level, or more commonly, included on the CNPS list, simultaneously. Therefore, the table below includes a count based upon the highest level of protection granted for each species.

	I-5 Alignment		SR-58/Soledad Canyon
	Union Station Segment	Wheeler Ridge Segment	
Federal or State Threatened or Endangered Species	9	8	10
Federal or State Species of Special Concern	4	4	7
CNPS List 1 Plant Species	0	0	2
CNPS List 3 Plant Species	0	0	1

It should be noted that one plant species, Parry's spine flower, included in the SR-58/Soledad Canyon alignment is only included on the CNPS List 3 species (page 27). This designation indicates that CNPS needs more information on the plant. Therefore, it may not be appropriate to include this species in the list.

The Technical Report includes the type of habitat and elevations associated with each species and their potential to occur within the alignment from low to high. The potential to occur was based upon records

3.15 Biological Resources and Wetlands

of occurrence in the CNDDDB and CNPS databases and occurrence of suitable vegetation based upon the CNDDDB Gap Analysis maps. These records often consisted of undated herbarium records that ranged from the 1920's to the mid-1990s. More recent information provided by the CNPS online inventory indicates that many historic occurrences of Bakersfield small-scale, Bakersfield cactus, Lancaster milk vetch, San Joaquin woolly threads, and San Fernando Valley spine flower have been extirpated. No fieldwork was conducted to confirm that suitable soils, vegetation, or other habitat constituents exist for these or other species. Additionally, the elevations at each segment of the alignment were not compared to the elevational range associated with each species, as is common with biological reviews to determine the potential occurrence of plant species.

Several of the discussions of special-status plant and wildlife species indicate that no records occur of that species in the project vicinity. However, recent surveys for other projects indicate that several of these species occur or potentially occur within the .5-mile study area of the alignment paralleling I-5. These species include include Tejon poppy, Comanche Point layia, Fort Tejon woolly sunflower, and Piute Mountains navarretia (plants), and blunt-nosed leopard lizard, California horned lizard, Tehachapi slender salamander, two-striped garter snake, burrowing owl, Cooper's hawk, golden eagle, prairie falcon, loggerhead shrike, willow flycatcher, and tri-colored blackbird (wildlife). These species should have been disclosed in the EIR/EIS as potentially occurring and likely would have been observed if appropriate surveys had been conducted. The impact section will also need to be modified to reflect this information.

Section 2.4.6 Wildlife Movement/Migration Corridors

Please see comments above for the EIR/EIS regarding the use of the Missing Linkages report that apply to this section as well.

The alignment daylights above the ground near Tejon Lake. Potential direct and indirect impacts on the lake and its associated biological resources need to be more accurately disclosed. In addition, in those locations where the alignment is above ground, the presence of chain-link or other fencing (bordering both sides of the tracks) that is designed as a safety measure to exclude debris, animals, and people would essentially serve as a barrier to wildlife movement. This is especially true in the San Joaquin Valley portion of the alignment, particularly between the California Aqueduct and where it disappears underground partially up Grapevine Peak, where this fencing and the berm upon which the track rests in this location, will effectively block movement by the endangered San Joaquin kit fox and blunt-nosed leopard lizard, and a number of more common terrestrial species. According to engineering drawings prepared by the lead agency but not disclosed in the EIR/EIS, the berm extends to 250 feet high at the Grapevine interchange. This height would require a width at the base that would preclude any mitigation

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Comment Letter O056 Continued

3.15 Biological Resources and Wetlands

of this impact. In the Tehachapi Mountains near Tejon Lake, the alignment is again above ground and would block east/west movement by wildlife species. The underpass at the I-5/Highway 138 intersection, which is essentially the only viable crossing point for wildlife on the south side of Tejon Pass in this area, would also be blocked by the alignment. The EIR/EIS does not adequately disclose impacts on wildlife movement in these areas.

Section 3.2 Significance Criteria for Biological Resources

The criteria used here are not consistent with those used in the EIR/EIS.

Section 3.3 Impacts Assessment

The technical document states (p.63):

"Where feasible, construction type was factored into the impacts assessment. Because the segment type and construction type occurred in two separate GIS layers, it was not possible to conduct the impacts analysis on both segment and construction type. That is, we could quantify impacts of each segment or each construction type from Bakersfield-to-Los Angeles, but not both. To remedy this situation, biological resources from the CNDDB were overlain on construction type to determine which of these resources occurred in tunnel and noting which construction segment or segments the tunnel areas corresponded to. Then, for a given segment, if all occurrences of a particular resource (sensitive plant community, for example) were only identified within tunnel areas, then impacts to this resource were assumed to be non-existent. If some occurrences of a particular resource were identified in tunnel areas and some in areas of a different construction type (cut and fill, for example), then qualifying statements were added to Section 4.0 identifying that impacts to the resource would be reduced due to tunneling where some of these resources were located. Acreages of plant communities occurring within tunnel sections for a given segment were estimated by taking the fraction of the acreage of the plant community polygon occurring within the tunnel segment. However, this was not done for jurisdictional waters and wetlands due to the nature of the database. For the purposes of this analysis, it was assumed that tunneling would not result in impacts to biological resources within tunnel sections because the tunnel will be lined and sealed as construction with a tunnel-boring machine takes place, with no impacts on groundwater levels and no potential for dewatering impacts on surface resources. Some surface disturbance associated with tunnel portal construction would occur, but this disturbance would only occur for a minimal distance (approximately 100 feet, for instance) at the beginning and end of the tunnel sections."

How does this take into account the roads leading to tunnel segments, the portal areas which we presume are wider than the construction ROW, and the spoils from tunneling? This could be a significant issue when comparing the greater length of tunneling associated with the I-5 Tehachapi Corridor as compared with the SR-58/Soledad Corridor. The disposition of spoils from tunneling is a significant concern with respect to biological resources and must be addressed.

The report states, "For the purposes of this analysis, it was assumed that tunneling would not result in impacts to biological resources within tunnel sections because the tunnel will be lined and sealed as construction with a tunnel boring machine takes place, with no impacts on groundwater levels and no potential for dewatering impacts on surface resources." (page 63). This is a huge assumption to make,

3.15 Biological Resources and Wetlands

particularly when considering the results of some of the studies for tunneling under the Cleveland National Forest associated with the MWD Inland Feeder tunneling project. Any such assumption must be validated.

Section 4.2 Modal Alternative

A number of additional special-status plant and animal species need to be added to the lists in this section of various species affected by the differing alignment segments. Most notably, impacts on several bird species (burrowing owl, Cooper's hawk, golden eagle, prairie falcon, tricolored blackbird) are missing. Summary section, 4.2.3, will consequently need to be updated.

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Comment Letter O056 Continued

SECTION 3.17 - CUMULATIVE IMPACTS EVALUATION

This section provides only a superficial discussion of cumulative impacts for the Systems Alternatives, and does not differentiate on the cumulative impacts of the HST alignment alternatives. Appendix 3.17a provides information on cumulative projects for the SR-58 corridor, but nothing for any of the other alignments between Bakersfield and Los Angeles. Consequently, the EIR/EIS is in violation of Section 15130(b)(1)(A) of the CEQA Guidelines:

"A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) 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."

The method utilized within the EIR/EIS is the list method and must delineate which projects should be considered from a cumulative perspective for each segment.

Page 3.17-1 (4th paragraph): states that the projects considered for the cumulative analysis are primarily transportation related but do include major projects such as the University of California (UC) at Merced campus. This paragraph further indicates that all projects included within the analysis are listed in Appendix 3.17A. The list of cumulative projects should not be confined to transportation projects. Other projects, even those not as large scale as a university campus, could easily produce transportation impacts to the circulation system and air quality impacts to the basin. To not include all projects would be contrary the direction provided by the CEQA Guidelines Section 15130(b)(1)(A): "A list of past, present, and probably future projects producing related or cumulative impacts..." This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

Page 3.17-3 (5th paragraph): "Implementation of the proposed HST Alternative would result in high potential noise impacts along approximately 8 mi to 133 mi (13 km to 214 km) of alignment, depending on the alignment options selected. These potential impacts, when combined with the potential noise impacts of other highway, roadway and transit expansion projects in the region, would contribute to localized potential cumulative noise impacts during construction and operation." This generalized summation of impacts is not specific and dismisses potential impacts summarily with no substantiation. The EIR/EIS includes no specific discussion of I-5 alignment impacts to projects such as Tejon Industrial Complex East or Centennial. Potential cumulative noise and vibration, air, energy, aesthetics, biological, and traffic impacts could impact both projects due to the I-5 alignment and there is no discussion of impacts. Both of these projects have been discussed for several years and are in process within the

3.17 Cumulative Impacts Evaluation

County of Kern and County of Los Angeles, respectively. These conclusions are supported with no facts or figures to make this conclusion. Supporting documentation must be provided in order to support these allegations.

Contrary to the intent of CEQA Guidelines 15168(b)(2), the Program EIR does not reflect a thorough consideration of cumulative effects associated with the HST alignment alternatives. The section should clearly delineate the cumulative impacts to each HST alignment. "Combining" HST cumulative alignment impacts into one discussion provides the decision makers with no real means of identifying potential impacts associated with each of the alternative alignments. Consequently no valid conclusions can be made with regard to the cumulative impacts of the alternative HST alignments. The cumulative impact analysis as proposed is inadequate and must be revised to include all projects that may create combined impacts when considered in conjunction with each of the proposed HST alignment alternatives. This is particularly true with regard to geology, biological resources, and aesthetics.

Page 3.17-5 (last paragraph): There are no cumulative conclusions made with regard to the HST alternative alignments with regard to agricultural lands. As discussed in Section 3.8 Agricultural Lands above and in Section 5.0 Growth Inducing Impacts below, there is the high probability for the HST to induce population growth in Bakersfield, because of the faster and cheaper commute it would make possible between less expensive housing there and employment centers in Los Angeles County. The cumulative effects of growth pressures on the conversion of agricultural lands to residential and other supporting land uses were not analyzed in the EIR/EIS. Consequently, the EIR/EIS must be revised to include discussion regarding cumulative impacts to agricultural lands.

Page 3.17-6 (4th paragraph, last sentence): "Thus the HST Alternative could contribute to construction-related cumulative impacts on visual resources." The EIR/EIS needs to be clear on whether the HST alignments would or would not have cumulative aesthetic and visual resource impacts. There will be significant visual impacts with the I-5 alignment. Grading, tunneling, above ground visual impacts that would not only result in construction impacts, but would also result in permanent impacts and would consequently create operational impacts. At what point does the construction become significant? The EIR/EIS provides no rational or definitive conclusions. All conclusions must be substantiated and consequently this section must be revised.

Page 3.17-8 (3rd paragraph): Discussion of each HST alignment is crucial in order to determine specifically where the cumulative geology impacts may occur with regard to impacts associated with tunneling. The HST alignment alternatives would have substantially different impacts with regard to tunneling impacts. To combine these impacts together does not give the decision makers a clear picture of where, or in which alignment, the geological impacts would occur.

O056-15

O056-15 cont.



Comment Letter 0056 Continued

SECTION 5 – INDUCED GROWTH

This section of the Draft Program EIR/EIS addresses the extent of potential statewide, regional and certain local growth effects of the HST and Modal Alternative in terms of population and employment change and land consumption associated with these changes. It focuses primarily on analysis of very large geographic areas (subregions and counties), and differences in percentages of growth between the HST and Modal Alternative, as compared with the No-Project Alternative, both of which mask important sub-county absolute growth and HST station-specific issues. The analysis also fails to analyze important segments of the proposed HST system that cross its subregional definitions, such as the Los Angeles-Bakersfield Segment, whose end points are located in different analysis subregions (Southern California and South Central Valley, respectively) and counties (Los Angeles and Kern, respectively). As a result, this section does not fulfill the requirements under CEQA and NEPA that the induced growth section analyze and disclose the degree to which the project directly or indirectly fosters population, household, housing and employment or other indicators of economic growth, removes obstacles to growth or taxes community service facilities to the extent that would cause construction of new facilities, or encourages or facilitates other activities that cause significant environmental impacts. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

Section 5.3 – Potential Growth-Inducing Effects

The induced growth section appears to be based largely on analysis contained in a technical report cited in the section and numerous tables as “Cambridge Systematics, Inc., 2003.” Though this document is listed in the references, it was not included among the Draft EIR/EIS technical reports made available for public review. The fact that it was not included among the voluminous published Draft EIR/EIS documents prevents members of the public and decision makers from performing a complete review of the Draft EIR/EIS, contrary to the requirements of CEQA and NEPA. This is an issue of significant concern, and it is important that the EIR/EIS address this issue fully and accurately in order to comply with CEQA.

The induced growth impacts analysis is based on a projection of total, statewide economic impacts (measured in terms of population and employment growth) due to the HST, Modal Alternative, and No-Project Alternative. The projection involved estimating, first, the direct transportation benefits of each alternative, measured in terms of business cost savings, business attraction effects and quality of life changes, and then deriving the total impacts of the direct effects from an econometric model (i.e., the sum of direct, indirect and induced changes in population and employment by industry). These statewide total impacts were then allocated to counties. Estimates were then made of the land required to absorb

0056-16

5.0 Induced Growth

the projected numbers of people and jobs in each county that would be associated with each alternative. The county-level analysis was then regrouped into each of five distinct subregions (i.e., Bay Area, North Central Valley, South Central Valley, Southern California and Rest of California).

Though it apparently relies on a very sophisticated set of integrated modeling techniques, the analysis is conducted using geographic scales that mask potentially important impacts that cross its system of subregional areas and counties. For example, the end points of the Los Angeles-Bakersfield Segment (i.e., Sylmar and Bakersfield) are located in counties (i.e., Los Angeles and Kern, respectively) which are in two separate analysis subregions (Southern California and South Central Valley, respectively), and there is no analysis of induced growth across subregions. Thus, prospects for the HST to induce population growth in Bakersfield, because of the faster and cheaper commute it would make possible between less expensive housing there and employment centers in Los Angeles County, is not explicitly considered in the induced growth analysis. Similar limitations apply to the relationships between the Bay Area subregion and its constituent counties and the North Central Valley and its counties, where similar home price disparities versus employment center location relationships now exist and can be expected to worsen over time.

This significant growth-inducing issue received only scant attention at page 5-17 of the Draft EIR/EIS, consisting of a conclusory statement that analysis suggests that “...the additional population growth under the HST Alternative is driven by internal growth...related to initiation of HST service, rather than potential population shifts from the Bay Area and Southern California accompanied by long-distance commuting.” No analysis or other evidence leading to this “suggestion” is included in the Draft EIR/EIS. Nor does it include any analysis or evidence to support a claimed “stronger propensity” for population redistribution from Sacramento and San Joaquin Counties to “lower-cost and better-positioned (for HST service) housing” in Merced and Stanislaus Counties.

The urbanization analysis relies on urban land cover data provided by the California Farmland Mapping and Monitoring Program (CFMMP). Review of the Agricultural Lands section of the Draft EIR/EIS (Section 3.8) indicates, however, that areas south and west of Bakersfield are not included in the CFMMP, so it is not clear on what basis the induced growth section reached any conclusions about urbanization, which is a critical analytic component of its assessment of impacts of the HST alignment options for the Bakersfield-Los Angeles Segment.

The Draft EIR/EIS includes only general, conclusory statements that the various HST alignment options result in very similar growth-inducing impacts, without presenting the factual basis for the conclusion. Only a footnote (p. 5-21) mentions a difference in the Antelope Valley from the alignment that includes a station in Palmdale, and that result is much higher population (25,000 people) than jobs (15,000), which raises further questions about the earlier conclusion that the HSR alternative will not cause much of an

0056-16 cont.



**Comment Letter 0056 Continued**

*5.0 Induced Growth*

effect due to easier and less expensive access between major job centers (e.g., Los Angeles County) and areas with considerably less expensive housing (e.g., Bakersfield and the Antelope Valley).

The final subsection of the induced growth section discusses, in a very general way, potential indirect impacts on the physical environment that are related to incremental population and employment growth associated with the Modal and HST Alternatives. Given the section's use of very large geographic areas in the analysis, and impact quantification that is limited primarily to small percentage differences in population and employment implied by the HST and Modal Alternatives, as compared with the No-Project Alternative, it is not surprising that the analysis finds little prospect for indirect environmental impacts.

The discussion does acknowledge, however, that while the statewide and regional effects may differ only slightly, the localized effects at HST stations (for the HST Alternative) and interchanges or airports (for the Modal Alternative) could be larger than under the No-Project Alternative. This point is acknowledged again in a few of the subsections on specific environmental topics (e.g., direct and indirect air quality effects could be larger around station areas; development pressures associated with HST Alternative would be concentrated in industry sectors that tend to locate near stations), but no analysis is included. The lack of station-specific analysis is excused as inapplicable to a program-level environmental document. Given the admission that local growth-inducing impacts could differ significantly from system-wide impacts, it would have been reasonable for the induced growth analysis to include a general review of these issues for a representative sample of stations, most of which have already been identified, at least within clusters of candidate locations.

This concern that important information about potential growth-inducing impacts associated with HST stations has been impermissibly avoided in the Draft EIR/EIS is underscored by the subsection on "avoidance and minimization strategies." This subsection summarizes research conducted about development patterns around HST systems elsewhere in North America, Europe and Asia. Though none of that research is included in the published Draft EIR/EIS, the summary of it in the growth-inducement section clearly indicates that development is likely to concentrate around station sites; therefore, the induced growth effects of the HST Alternative are likely to be concentrated there. While this research may help support the Draft EIR/EIS conclusion that an HST Alternative would not cause significant conversion of non-urbanized land to urbanized uses, it served to further emphasize the significance of any station-level impact analysis.

O056-16  
cont.



**Response to Comments of Susan Tebo, Associate Principal, Impact Sciences, August 30, 2004 (Letter O056)****O056-1**

For the Program EIR/EIS the traffic analysis has been completed at a regional level of detail based on regional modeling data. Should the HST program move forward, detailed intersection level traffic analysis will be part of subsequent project specific analysis. Should the HST proposal move forward, the Authority and the FRA will work closely with local and regional agencies as well as other stakeholders to ensure consistency with City traffic impact guidelines and to ensure that adequate access improvements are identified to minimize and mitigate potential traffic impacts. Please also see standard response 3.17.1.

**O056-2**

Only system alternatives were addressed, not route alignments. The route options used in the evaluation were not provided.

Changes in emissions generated within the appropriate air basins under the proposed project alternatives were estimated using projected changes in vehicular, train and bus miles of travel. The purpose of this analysis was to provide for alternative comparison purposes an indication of how the alternatives would affect the amounts of emissions generated in each basin. The level of detail in these analyses would not be sufficient to further refine these projections to estimate changes within each basin from various route options under each alternative. In addition, it is not anticipated that the route options within a basin would significantly affect the overall changes in the amounts of emissions generated within the basin.

Baseline conditions did not include hydrogen sulfides, vinyl chlorides, or visibility.

Analyses were conducted for the pollutants that would be most affected by the project alternatives. As the alternatives would not be expected to significantly affect hydrogen sulfide or vinyl chloride emissions or visibility conditions, and therefore these factors would

not provide a distinction between the alternatives, these items were not addressed.

Specific levels of nonattainment (e.g., moderate, serious, severe, extreme) were not provided.

Although the specific levels of nonattainment were not provided in the Draft Program EIR/EIS, the specific General Conformity significant impact levels for each air basin, which are based on these levels, were used to determine whether the proposed action would cause low adverse air quality impacts (i.e., estimated increases in emissions that are less than the significant impact levels) or medium adverse air quality impacts (i.e., estimated increases in emissions that are greater than the significant impact levels but less than 10 percent of the total emissions generated in the basin). No alternative was estimated to result in high adverse air quality impacts (i.e., estimated increases in emissions that are greater than 10 percent of the total emissions generated in the basin). These results are provided in Tables 3.3-9 and 3.3-13. Specific levels of nonattainment will be provided in the Final Program EIR/EIS.

Hazardous air pollutants (HAPS) were not addressed.

HAP emission rates from the affected transportation emission sources (i.e., motor vehicles, trains, and planes) are related in changes in hydrocarbon emission rates. Relative changes in HAP emissions in each basin from the project alternatives can therefore be estimated from the changes in hydrocarbon emissions provided in the document.

Detailed information on the data used in the analysis was not provided.

Detailed information on the methodologies, assumptions, and emission factor sources are provided in the Air Quality Technical Evaluation Report.

*Inconsistent terminologies were used for certain pollutant types (e.g., HCs versus VOCs). Also, HC and NOx were presented as greenhouse gases*

There are some inconsistencies in the text, where HC is discussed in some sections, TOG in other sections, and ROG in still other sections. However, Section 3.3-2B includes an accurate discussion of these terms, where it is stated that “hydrocarbons (HC) comprise a wide variety of organic compounds, including methane (CH<sub>4</sub>). Hydrocarbons are classified according to their level of photochemical reactivity: relatively reactive or relatively non-reactive. Non-reactive hydrocarbons consist mostly of methane. Emissions of total organic gases (TOG) and reactive organic gases (ROG) are two classes of hydrocarbons measured for California’s emission inventory. TOG includes all hydrocarbons, both reactive and non-reactive. In contrast, ROG includes only the reactive HC.”

The text will be updated for the Final Program EIR/EIS to so that HC and TOG, which are same, will be addressed consistently. The text will also be updated to reflect that fact that methane (as opposed to HCs) and nitrous oxide (as opposed to nitrogen oxides) are greenhouse gases. Neither change will affect the results of the air quality analysis.

*The methodology used to estimate on-road emission burdens not clear.*

Detailed information on the methodologies, assumptions, and emission factor sources are provided in the Air Quality Technical Evaluation Report.

*Detailed microscale analyses were not conducted even though the necessary information was available.*

While a great deal of traffic data were developed for the programmatic Draft Program EIR/EIS, not enough site specific data was available to conduct a detailed microscale analysis for all of the affected intersection within each air basin. Detailed designs and entry/exit points for all of the affected parking facilities would be required, as well as the localized roadway geometries and traffic

conditions (e.g., signal timing, volumes, vehicles mixes, etc) at all of major roadways affected by the project alternatives. A great deal of additional information is also required to properly select the appropriate mobile source analysis sites using procedures established by the USEPA and CALTRANS. These analyses will be appropriate during project level review which more detail is available concerning specific alignments and facility design.

*Construction phase impacts not addressed.*

The detailed information necessary to conduct a quantitative construction phase analysis is not available for this program-level review. Information such as the years of construction operations at each analysis site, the types of equipment and hours of equipment operating at each site, the location of this equipment relative to nearby sensitive land uses, the number of trucks entering, leaving, and idling near site, the mitigation measures that may be required or proposed at specific sites be specified in enough detail to conduct a quantitative analysis in future environmental studies.

*Significant levels were not established and significance findings of alternatives were not provided.*

The General Conformity significant impact levels were used to determine significant impact levels. These values were used to determine whether the proposed action would cause low adverse air quality impacts (i.e., estimated increases in emissions that are less than the significant impact levels) or medium adverse air quality impacts (i.e., estimated increases in emissions that are greater than the significant impact levels but less than 10 percent of the total emissions generated in the basin). No alternative was estimated to result in high adverse air quality impacts (i.e., estimated increases in emissions that are greater than 10 percent of the total emissions generated in the basin). These results are provided in Tables 3.3-9 and 3.3-13.

**O056-3**

The screening procedure provides distances from the center of a corridor to define an area enclosed by parallel contours. However,

noise and vibration impact criteria relate to the number of people who are likely to be annoyed by activity interference. The areas defined by the screening distances along the alignments, together with available US census based population density information in GIS format, provide a measure of the number of people potentially impacted by HST and the other alternatives. A tabulation of people alone is not the only indicator for noise and vibration impacts – noise-sensitive institutional and multi-family land uses must also be factored in to the assessment. This information is provided in the regional technical reports. Future project level analysis would provide detailed inventories of sensitive land uses.

At the program level, however, a more general rating system is appropriate in order to compare the potential severity of noise and vibration impacts and the need for mitigation among system alternatives and alternative HST corridors. The impact rating methodology provides a comparison of the lengths of corridor where mitigation may be required. This analytic approach provides information sufficient to estimate the relative potential for noise impact as well as potential mitigation costs associated with each alignment option being compared.

For the Program EIR/EIS the assessment of noise impact used equivalent noise criteria for each transportation mode as established by the responsible US DOT modal agency. As applied in the programmatic noise analysis, potential noise impact was be the population within the screening distance for the HST; for airports, it was be the population within the DNL=65 dBA contour; and for highways, it was be the population within the Peak Hour Leq = 67 dBA contour.

#### **O056-4**

The differences in HST system energy requirements among the HST alignments would be negligible and would not help differentiate among the options. Therefore, the energy analysis was performed for a representative HST Alternative and described in this Program EIR/EIS. Please see standard response 3.15.13 regarding the intended uses of this Program EIR/EIS. Based on the information in

the Program EIR/EIS and the public comments on this document, the Authority has identified the SR-58/Soledad Canyon alignment option as preferred for the Bakersfield to Los Angeles segment. Please see standard response 3.15.11 regarding this decision.

#### **O056-5**

Overall, it can be expected that the HST Alternative would introduce additional EMF exposures or EMI at levels for which there are no established adverse impacts on humans or wildlife. EMF emissions from HST vehicle passbys are very low, and impacts are therefore not expected to be significant. Any potential EMF/EMI impacts will be identified and appropriate mitigations identified in the subsequent project level environmental review, as summarized in the Program EIR/EIS in Section 3.6.4 and 3.6.5. The mitigations suggested at this program level are strategies that will only apply if related impacts are identified.

#### **O056-6**

Regional and local land use plans were reviewed for areas through which the Modal Alternative and the HST alignments would pass. These plans were used to create a geo-spatial database for evaluation of possible land use impacts (Section 3.7). Consistency with local plans was evaluated during preparation of the regional technical studies. These technical studies (and screening reports) for each of the five regions were made available on the California High Speed Rail Authority website:

([http://www.cahighspeedrail.ca.gov/eir/regional\\_studies/default.asp](http://www.cahighspeedrail.ca.gov/eir/regional_studies/default.asp)) and the Final Program EIR/EIS incorporates these technical studies by reference. The technical studies applied the commentor's criteria of evaluation. Review of site-specific zoning along the multiple Modal and HST alignments was well beyond the scope of this Program EIR/EIS. The Co-lead agencies worked closely with multiple state and federal agencies (including those identified in the comment) regarding the overall structure and analytic approach for the Program EIR/EIS. Please see standard response 3.15.10 for more information on how habitat conservation plans have been and

will continue to be addressed in the planning and environmental process. The Co-lead agencies believe that the environmental justice analysis prepared for the Program EIR/EIS is appropriate and sufficient for the intended purposes of the Program EIR/EIS. The basis for evaluating environmental justice impacts is outlined on pages 3.7-4 and 3.7-5 of the Program EIR/EIS. The State has not prescribed specific procedures in CEQA documents. Based on the information in the Program EIR/EIS and the public comments on this document, the Authority has identified the SR-58/Soledad Canyon alignment option as preferred for the Bakersfield to Los Angeles segment. Please see standard response 3.15.12 regarding this decision. The Co-lead agencies believe that the Program EIR/EIS does provide sufficient information to decide whether to advance the high speed train system and whether to eliminate some and identify other proposed corridor alignments (e.g. the I-5 alignment between Bakersfield and Los Angeles) for further study. Please see standard response 3.15.13 for more information on the use of the Program EIR/EIS. The Table of Contents, section divider, and section heading all contain a common title: "Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice" in the Draft and Final Program EIR/EIS. Land use compatibility determinations were based on computer-generated data developed for the multiple Modal and HST alignments. The data is available upon request.

#### Specific Comments

p. 3.7-1: Comment regarding p. 3.7-1 has been incorporated into the Final Program EIR/EIS.

p. 3.7-5: The Co-lead agencies believe that the environmental justice analysis prepared for the Program EIR/EIS is appropriate and sufficient for the intended purposes of the Program EIR/EIS. The basis for evaluating environmental justice impacts is outlined on pages 3.7-4 and 3.7-5 of the Program EIR/EIS. Please see response to O044 – 18 regarding the environmental justice evaluation.

Figures 3.7-3 and 3.7-5: Data in response to these specific comments have been incorporated into the Final Program EIR/EIS.

Table 3.7-1: Multifamily residential is a factor in both medium and high compatibility impact categories, but at different densities. The medium compatibility impact category includes multifamily densities up to 18 units per acre and the high compatibility impact category includes densities above 18 units per acre.

p. 3.7-8: Information from the comment has been incorporated into the Final Program EIR-EIS.

p. 3.7-11: While the improvements are programmed and funded, they are not all at the same stage of project development. The environmental processes for many of the projects have not been completed and are therefore not it would be speculation to try to identify specific impacts. In addition, the No-Project improvements are relatively small in scope when compared to the improvements proposed in the System Alternatives (HST and Modal) and are incorporated into the system alternatives as part of the future no project condition.

p.3.7-12: The Co-lead agencies believe that the environmental justice analysis prepared for the Program EIR/EIS is appropriate and sufficient for the intended purposes of the Program EIR/EIS. The basis for evaluating environmental justice impacts is outlined on pages 3.7-4 and 3.7-5 of the Program EIR/EIS. Please see response to O044 – 18 regarding the environmental justice evaluation.

Land Use Compatibility: The statement is referring to the alignment options identified in your comment.

p. 3.7-19: Potential review of site-specific zoning along the multiple Modal and HST alignments was well beyond the scope of this Program EIR/EIS.

Property-HST Alternative: Section 3.7-4 C. Property/HST Alternative states the route miles and percentages of High impact that are shown on Figure 3.7-12.

Environmental Justice: Land use compatibility determinations were based on computer-generated data developed for the multiple Modal and HST alignments. The SR-58 option refers to the portion of the

SR 58/Soledad Canyon alignment option that generally follows the SR 58 corridor through the Tehachapi Mountain crossing and into Bakersfield. No conflict is apparent in the comparisons. The Authority can provide the data for the specified segments to the commentor upon request, if desired.

**Mitigation Strategies – Land Use Compatibility:** In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include mitigation strategies that would be applied during project level environmental review to the HST Alternative. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts.

**Mitigation Strategies – Environmental Justice:** The Co-lead agencies believe that the environmental justice analysis prepared for the Program EIR/EIS is appropriate and sufficient for the intended purposes of the Program EIR/EIS. The basis for evaluating environmental justice impacts is outlined on pages 3.7-4 and 3.7-5 of the Program EIR/EIS. Please see response to O044 – 18 regarding the environmental justice evaluation. Environmental justice issues will be further addressed in project specific analyses when more information concerning specific alignments and facilities design options will be available.

#### **O056-7**

Use of the Land Evaluation and Site Assessment (LESA) model will be considered during project level environmental review. Parcel specific analysis would be conducted at the subsequent project level of environmental review.

The program level analysis is focused on identifying, avoiding and minimizing potential direct impacts and thus minimizing any associated indirect impacts. Potential indirect impacts will be addressed during the project level environmental review when sufficient detail is available regarding specific alignment location and facilities placement. Growth inducing impacts are discussed in Chapter 5, Section 5.2. See also Standard Response 5.2.1.

Figure 3.8-11 has been correctly identified in the List of Figures in the Final Program EIR/EIS.

In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include mitigation strategies that would apply in general to the HST system. Each section of Chapter 3 also outlines specific design methods and features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts.

The detail of engineering associated with the project level environmental analysis will allow further investigation of ways to avoid, minimize and mitigate potential impacts to agricultural resources. Only after the alignment is refined and the facilities are fully defined through project level analysis, and avoidance and minimization efforts have been exhausted, will specific impacts and mitigation measures be addressed.

#### **O056-8**

The Program EIR/EIS (Section 3.9.2 C.) characterizes the I-5 corridor through the Tehachapi Mountains as “highly scenic mountain range (natural open space) through the Tehachapi Mountains and Angeles National Forest”. It also identifies scenic routes, scenic overlooks and viewpoints along the route. Table 3.9-1 also identifies potential high-contrast impacts of the HST alignment option along I-5 at the recreation areas and viewpoints.

Visual impacts are highly site-specific in nature. These issues will be addressed during subsequent project level environmental review, based on more precise information regarding location and design and construction of the facilities proposed (e.g., elevated, at-grade, catenary design features, fencing type and location, construction staging areas, construction equipment required, etc.). The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential visual affects. Only after the alignment is refined and the facilities are fully defined through project level analysis, and avoidance and minimization efforts have been

exhausted, will specific impacts and mitigation measures be addressed.

The visual simulation depicted in Figure 3.9-18B is representative of potential visual impacts related to large cut and fill slopes. This figure represents potential visual effects in typical fashion of all alignment options with cut and fill slopes.

#### **O056-9**

Based on the information in the Program EIR/EIS and the public comments on this document, the Authority has identified the SR-58/Soledad Canyon alignment option as preferred for the Bakersfield to Los Angeles segment. Please see standard response 3.15.12 regarding this decision.

#### **O056-10**

Hazardous materials impacts are highly site-specific in nature. These issues will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed and the construction and operation activities that are likely to occur near any potentially impacted sites. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential impacts. Only after the alignment is refined, the facilities are fully defined through project level analysis, construction and operational plans are refined, and avoidance and minimization efforts have been exhausted, will specific impacts and mitigation measures be addressed. Hazardous materials used in operation, maintenance, and construction of the proposed system would be defined and addressed at the subsequent project specific level of analysis.

The program-level analysis does not include a detailed assessment of the nature or extent of any hazardous materials or wastes that may be present at identified sites, or the degree or specific nature of potential impacts under the various alternatives. The analysis and identification of potential hazards within the study area of alternative corridors and alignments is useful in comparing overall system

alternatives and in identifying areas where avoidance may be possible in subsequent project-level review. At this program level of analysis, the analysis of Hazardous materials did not result in any differentiation between HST alignment options.

Figure 3.11-1 has been revised in the Final Program EIR/EIS to reflect all of the SPL listings identified in the Appendix 3.11-A.

Section 3.11 presents the analysis of Hazardous Materials and Wastes at an appropriate level of detail to compare the system alternatives.

#### **O056-11**

Please see the technical studies for cultural resources (Cultural Resources, Historic Architecture, and Cultural Resources, Archeology) for this study region. These technical reports, prepared for five regions of the Program EIR/EIS study area, served as supporting information for the Draft Program EIR/EIS. The reports are available for review on the California High Speed Rail Authority website:

[http://www.cahighspeedrail.ca.gov/eir/regional\\_studies/default.asp](http://www.cahighspeedrail.ca.gov/eir/regional_studies/default.asp)

and have been incorporated in the Final Program EIR/EIS by reference. The reports describe the methods for evaluation, the APE, the data sources, summary listings of cultural resources, sensitivity evaluations, significance criteria, comparisons of alternatives and options. Based on the information in the Program EIR/EIS and the public comments on this document, the Authority has identified the SR-58/Soledad Canyon alignment option as preferred for the Bakersfield to Los Angeles segment. Please see standard response 3.15.11 regarding this decision.

Various elements of the Impact Sciences' comments relate to the adequacy of the methodology employed for identifying potential Project impacts to cultural and paleontological resources. While other methods (e.g., intensive archaeological surveys, comprehensive historic architectural surveys, subsurface testing and evaluation, archival research, etc.) would be required and will be

applied if the decision is made to proceed with the proposed HST system, such intensive studies to identify specific Project effects are neither appropriate nor required for a Program EIR/EIS. In this Tier 1 document, the overall magnitude of potential effects of the Project are considered, as are the relative sensitivities of different Project alternatives (i.e. different modes and different routes). The level of analysis conducted during preparation of the Tier 1, Program EIR/EIS is appropriate for Tier 1 but insufficient to satisfy legal requirements (applicable for Tier 2) under the NEPA, CEQA, and the National Historic Preservation Act (NHPA) that mandate disclosure of specific Project effects on historic properties. That, however is not the intent of this Tier 1 document, a Program EIR/EIS.

The Federal Railroad Administration (FRA) and California High Speed Rail Authority (Authority), serving as lead agencies, respectively, for federal (NEPA/NHPA) and state (CEQA) compliance, are well aware that methodologies adopted for the Tier 1 document do not conform to “common practices”, typically employed for identification of National Register-eligible properties and project-specific effects to those. Given the scope (statewide) and complexity (multiple alternatives) of the possible undertaking, however, the FRA and Authority have chosen, appropriately, to implement a phased identification effort, as provided for in Section 106 of the NHPA consultation regulations:

“Where alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted, the Agency Official may use a phased process to conduct identification and evaluation efforts (36 CFR 800.4(b)(2)).”

The system Alternatives, meet the above criteria. It consists of multiple potential corridors, covering large stretches of land, and areas of restricted access. To employ “common practice” of conducting intensive archaeological survey, historic structure evaluation, and NRHP-evaluation for all alternatives in this early phase of concept design would be inappropriate, unreasonable, and not practical. However, the FRA and Authority initiated consultation with the California State Historic Preservation Officer (SHPO) in November 2002 (see Appendix 3.12-A of the draft EIR/EIS) to gain

concurrence for the phased identification effort for historic properties. Similar consultation with the SHPO occurred in February 2003 (Appendix 3.12-A) to gain concurrence on a definition of the Area of Potential Effect (APE) that would guide the preliminary sensitivity evaluations of Project alternatives during the Program EIR/EIS studies.

Most importantly, invocation of the provisions of 36 CFR 800.4(b)(2), does not absolve the FRA and Authority from requirements for identifying potential impacts of the Project on NRHP-eligible or Traditional Cultural Properties. As identified in the SHPO consultation letters and in the Program EIR/EIS, those obligations will be fulfilled when it is possible to define specific potential impact areas for the proposed HST system alignments and facilities. Potential effects to historic properties and Traditional Cultural Properties that may occur during Project implementation will be disclosed fully, as will resolution of or mitigation to those effects, in a series of Tier 2 environmental documents.

#### Specific Issues

Method of Evaluation of Impacts: To evaluate the relative sensitivity of various Project alternatives, a number of methodologies were employed at the Program level to extrapolate from the limited “known” universe of potentially NRHP-eligible and Traditional Cultural Properties. These studies included records searches at the California Historical Resources Information System (CHRIS) Information Centers to identify known archaeological resources, landmarks and monuments, and NRHP-listed properties. As well, historical maps and archives were consulted, along with a windshield survey, to characterize the potential for built environment resources with the potential for NRHP-eligibility. This Program-level survey was intended to establish a baseline for evaluation of cultural resource sensitivity of various alternatives, not to enumerate or even estimate the actual number of NRHP-eligible properties on each alternative. That concerted, comprehensive effort will be conducted if and when specific potential build alternatives are identified.

Using the “known” inventory of archaeological sites, NRHP-listed properties, and regional histories, sensitivity rankings for alternative segments were extrapolated. Within the APE, no known Traditional Cultural Properties were reported by the Native American Heritage Commission. Contrary to Impact Sciences’ review of the Draft Program EIR/EIS, the sensitivity rankings were not based, merely, on raw numbers of “known” resources; those were considered as a proxy baseline. “Rankings considered the number of known sites per mile, accounting for the percentage of each segment that had been subjected to archaeological survey in the past” (Bakersfield to Los Angeles Region Cultural Resources Technical Evaluation, 2004:35). As well, the rankings gave further weight to “sites listed on the National Register of Historic Places, or designated California Landmarks, or that the APE contains sites known or reported to contain human remains” (*ibid.*:36). Furthermore, the proxy value of “known” archaeological resources was refined to consider the likelihood of encountering resources in areas that had not been surveyed (e.g., proximity to water and other resources, flat, habitable land, etc.), as well as those that had been surveyed, but may still contain previously unidentified buried archaeological sites.

Area of Potential Effect (APE): Identical APE widths were not evaluated for each alternative. The APE was explicitly identified, in consultation with the SHPO, to account for the potential for impacts to historic properties for each alternative (geographic and modal). While the varying APE widths do not result in “equal” analyses of number of cultural resources potentially occurring along each segment, they do accurately reflect the potential for adverse impacts along each segment. An alternative with a build scenario that requires take of 500 ft will obviously impact more resources than an alternative requiring only 100 ft of take; the cultural resources analyses consider these differences, and therefore, are not strictly comparable. The APE definitions and alternatives maps and descriptions aptly clarify the corridors that were considered for each alternative.

Fort Tejon: The presence of Fort Tejon in the I-5 Route between Grapevine and Frazier Park has been fully considered in both the

cultural resources impact analysis and the 4(f) analysis. It is a recognized NRHP site, as well as a State Park and State Historic Landmark. The oversight of a specific reference to Fort Tejon in the Kern County historical context is duly noted. While the tabulations in the baseline proxy values for cultural resources do not specifically name Fort Tejon (or any other specific resource), the tally of sites (*ibid.*: 36) indicates Fort Tejon’s status as a National Register-listed property. Sensitivity rankings explicitly considered this special status.

For the Modal Alternative, the analysis in the Cultural Resources Technical Evaluation states that “The presence of Fort Tejon, Tejon Ranch, Rose Stage Station and associated stage road, and the Sebastian (Tejon) Indian Reservation within or near the APE, suggests that there is an unknown but perhaps high potential to find historical archaeological sites from the Hispanic to American Transition Period (1848-1870) in the I-5: Tehachapi Crossing APE” (*ibid.*: 38). This high sensitivity, though, is somewhat offset by steep terrain in much of the APE for this corridor, suggesting low potential to locate previously unknown prehistoric sites. For the HST Alternative, however, the I-5: Tehachapi Crossing Corridor passes several miles east of Fort Tejon State Historical Park, avoiding the National Register location. As well, large portions of this route will be in bored tunnel, also reducing impacts to cultural resources (*ibid.*: 40).

High-Speed Train Alternative, SR-58/Soledad: The reviewer has confused the “Antelope Valley segment” of the SR-58/Soledad alternative with the composite of three segments of this alternative: SR-58 Corridor, plus Antelope Valley Corridor, plus Soledad Canyon Corridor. The only apparent discrepancy in the tabulations and summaries is a typo on Table 4.0-1 in the Technical Evaluation report, where 120+ sites for the Antelope Valley Corridor should read “20+”. Thus, while many of the Antelope Valley sites are historical trash scatters (NRHP-eligibility as yet unknown), sites in the other segments of the SR-58/Soledad Alternative are prehistoric.

High-Speed Train Alignment Comparisons: The summary of potential sensitivity for various alternatives on pages 3.12-22 and -

23 accurately summarizes the very complex set of analyses conducted for each segment of each alternative. The reviewer is advised to use the Cultural Resources Technical Evaluation report, in which analyses (archaeological and historical) are detailed for each segment of each alternative, if the summary is too distilled for clarification of particular issues.

*Cultural Resources Technical Report:* Additional Chumash and Kawaiisu tribal territories could be added to the map on page 15, but at the Program-level, this more expansive approach would serve no purpose. Letters were sent to all 101 individuals and groups identified by the Native American Heritage Commission as having potential concerns or information about archaeological sites or Traditional Cultural Properties along the general project alignments. This list had no direct concordance to approximate tribal territories shown in Figure 2.2-1.

*Paleontological Resources Technical Evaluation:* Because the relative impacts to paleontological resources for surface disturbance versus tunneling will never be quantifiable, this Program-level EIR/EIS analysis does not make the distinction. Instead, for all corridor alternatives, ALL potentially fossil bearing rock and sediment units are analyzed.

#### **O056-12**

The Co-lead agencies respectfully disagree with the assertion that the rating system for comparing potential geologic impacts is misleading. On the contrary, identifying the length, percentage of length, and general severity of potential impacts along a particular alignment option allows for comparison of alignment options with varying lengths between the same segment endpoints, and is appropriate for this program-level review. Specific aspects of the severity of each geologic impact or constraint cannot be determined until subsequent project specific analysis, based on more precise information regarding location and design and construction of the facilities proposed (e.g., elevated, at-grade, earthwork required, etc.). The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate

ways to avoid, minimize and mitigate potential geologic impacts. After the alignment is refined and the facilities are fully defined through project level analysis, geologic exploration is conducted, and avoidance and minimization efforts have been exhausted, specific impacts and mitigation measures will be addressed.

The Difficult Excavation rating for HST and highway alignment options is based on the percentage of surface segments in hard rock plus the percentage of tunnel segments with fault zones. According to this methodology the ratings for the I-5 and SR 58 alignment options are correct. Tunneling is typically more difficult in varying media as compared to homogenous media, even if it is hard rock.

The Geology and Soils Section (3.12) and the associated appendices provide a full listing of affected environment and environmental consequences (impact ratings for various categories of comparison) for each alignment option in each segment of the region. The co-lead agencies disagree with the commentor's assertion that the Section is confusing and unclear.

#### **O056-13**

Please see the technical study for hydrology and water quality for this study region. These technical reports, prepared for five regions of the Program EIR/EIS study area, served as supporting information for the Draft Program EIR/EIS. The reports are available for review on the Authority's website:

[http://www.cahighspeedrail.ca.gov/eir/regional\\_studies/default.asp](http://www.cahighspeedrail.ca.gov/eir/regional_studies/default.asp)

and have been incorporated in the Final Program EIR/EIS by reference. The report describes the methods for evaluation, the summary of impacts, and a comparison of the alternatives and options. The Co-lead agencies believe that the impact analysis evaluation procedures used were appropriate for the Program level EIR/Tier 1 EIS. Please also see standard response 3.15.13. Additional hydrological resource evaluation will occur as part of the project-level, Tier 2 studies. Based on the information in the Program EIR/EIS and the public comments on this document, the Authority has identified the SR-58/Soledad Canyon alignment option

as preferred for the Bakersfield to Los Angeles segment. Please see standard response 3.15.11 regarding this decision.

The Co-lead agencies believe that the impact analysis evaluation procedures used in the analysis were appropriate for the Program level EIR/Tier 1 EIS. See also response to Comment 0042-1. Additional hydrological resource technical analysis will occur as part of the project-level, Tier 2 studies.

Based on the information in the Program EIR/EIS and the public comments on this document, the Authority has identified the SR-58/Soledad Canyon alignment option as preferred over the I-5 alignment option for the Bakersfield to Los Angeles segment. Please see response to Comment 0012-22 regarding this decision.

Section 2.2.2 does reflect current CDFG stream alteration regulations.

The last sentence of Section 2.3.1 Lakes should read "For the HST Alternative, the majority of acreage occurs along the undeveloped portions of the I-5/Grapevine routes."

The last sentence of section 2.3.2 Streams should read "For the HST Alternative, the majority of rivers/streams occurs along the undeveloped portions of the SR-58/Antelope Valley and I-5/Grapevine routes."

Section 2.3.4, Groundwater. The aquifers are discussed in Section 4.2 of the Hydrology Technical Report. This Section also includes figure 4.2-2 illustrating the locations of the various aquifers.

## **O056-14**

### General Comments

As stated in Section 1.1 (Introduction) on page 1-2 of the Program EIR/EIS, "The FRA... determined that the preparation of a tier 1, program-level EIS for the proposed HST system is the appropriate NEPA document because of the comprehensive nature and scope of the HST system proposed by the Authority and the conceptual stage of planning and decision-making. ... The Authority has determined

that a program EIR is the appropriate CEQA document for the project at this conceptual stage of planning and decision-making, which includes identifying a preferred corridor and station locations and identifying options for phasing the development of the new system. No permits will be sought in this phase of the environmental review. If the HST alternative is selected at the conclusion of the Program EIR/EIS, project development will continue with project-specific environmental documentation to assess in more detail the impacts of reasonable and feasible alignment and station options in segments of the system that are ready for implementation." Page 1-3 goes on to state that, "...the level of detail provided in the [program- and project-level] documents differs substantially because a program-level document analyzes a general conceptual design of the proposed program and alternatives rather than providing detailed analysis of a specific project proposal. ... A program EIR/EIS is an informal document intended to analyze and to disclose to the public and to public decision-makers the environmental effects and benefits of a proposed program and its alternatives. ... It is intended that other federal, state, regional, and local agencies use the Program EIR/EIS to review the proposed program and develop expectations for the tier 2, project-level environmental reviews that would follow should the HST alternative be selected." Please also see standard responses 3.15.2, 3.15.3, 3.15.7, and 3.15.13.

The level of analysis provided in Section 3.15 (Biological Resources and Wetlands) is appropriate for this program-level review. All Alternatives were analyzed using the most accurate and up to date data available including the GAP analysis, CNDDDB, NWI and USGS topographic maps. Limitations in the data sources are recognized and disclosed in Section 3.15.1 B (Method of Evaluation of Impacts) in the EIR/EIS and in Appendix 3.15-C. All Alternatives were analyzed using the same methodology and data sources.

### Specific Comments

Study Area: As stated in Section 3.15.2 A (Study Area Defined), on page 3.15-4, in the EIR/EIS, the study area for the Bakersfield to Los

Angeles “region was 0.5 mi (0.8 km) on either side of the highway and rail corridors and around stations.” Although the 1,000-foot study area in urbanized areas and 0.25 mi study area in undeveloped areas was not used, the 0.5 mi study area encompasses these study areas and therefore impacts within these study areas are accounted for. The criteria used to address urbanized, undeveloped and sensitive areas are provided on page 82 of the Biological Resources Technical Evaluation. Developed areas included urban and rural infrastructure, excluding agriculture; undeveloped areas included agriculture and other undeveloped areas; and, sensitive areas included lagoons, estuaries, marshes, wildlife conservation areas, or wildlife sanctuaries.

**Data Sources:** The GAP analysis and CNDDDB were determined to be the best available information for the analysis. These sources were considered adequate for the purposes of the program level document as described above. Section 3.15.1 B (Method of Evaluation of Impacts) and Appendix 3.15-C disclose the limitations of these sources. To the extent possible, the investigators used the best available information that could be applied to the geography and expanse of the study area with the underlying objective; to compare alternatives to a similar level of detail. Considering the expanse of the study area and the program level phase of the process, existing data could not be verified in the field and may have resulted in some bias at certain locations where field investigations did occur versus in those areas where they were not conducted.

**Jurisdictional Waters:** The NWI and USGS topographic maps were determined to be the most accurate and up to date resources available for analysis. These sources were considered adequate for the purposes of the program level document as described above. Section 3.15.1 B (Method of Evaluation of Impacts) and Appendix 3.15-C disclose the limitations of these sources. The impacts assessment methods were also disclosed on pages 82 and 83 of the Biological Resources Technical Evaluation. While the NWI was the primary data source used in the regional wetlands analyses, The Draft Program EIR/EIS acknowledged that the NWI contained some gaps in information. The next best data source to research for

streambeds and wetlands are the USGS quadrangle maps for those gap areas. Using the USGS quadrangle maps is a reasonable source to determine the likelihood of streambeds and provides relative information for each alternative considered. The USGS maps are often consulted in the initial stages of environmental assessment research to identify the likely location of such resources as wetlands and streambeds. As indicated on page 81, the location of the blue-line streams were further researched and confirmed by the interpretation of current aerial photography. This level of effort is reasonable for each alternative given the programmatic level of the document.

It is important to recognize that the impact analysis included linear feet of impact for presumed non-wetland waters for the entire corridor. The acreages for wetlands, derived from the NWI, were specifically for wetlands and were not added to the total for the streambeds, calculated in linear feet. Consequently, because the numbers were not added together, the resources were not counted twice.

A program-level environmental document should provide sufficient relative detail to assess and compare the potential environmental consequences of each alternative considered. A program-level document is not used to permit a project and is not a project EIR or construction-level EIR. Detailed protocol survey or delineations are not appropriate at this level of analysis, particularly considering the specificity and certainty of the engineering and project description information available. It is anticipated that the program-level document provides decision makers with a comparative evaluation with the understanding that a subsequent document will address the proposed project to a level of detail consistent with the protocol needed to obtain relevant permits from state and federal agencies. The methods used for the Program EIR/EIS were defined with this tiered approach in mind.

*Methods of Evaluation:* Section 3.1 (Data Collection), page 81, of the Biological Resources Technical Report states which USGS quadrangles were not available as NWI maps.

*Affected Environment:* As stated in Section 1.1 (Introduction) on page 1-2 of the Program EIR/EIS, the HST program is in the “conceptual stage of planning and decision-making.” The ROW is not known with specificity and modifications to the general alignments are likely during the various stages of route alignment, planning and future design. A 0.5-mile buffer allows the decision-makers some appropriate flexibility when making alterations within this buffer. Also stated in Section 1.1, on page 3.15-3, of the Program EIR/EIS, “the identification of a potential impact on a specific resource is intended to be conservative and in some instances may be an overstatement, because neither habitat that is sensitive on species of concern may be found in or near the footprint of the proposed corridor or actual alignment.” This overestimate of resources occurs along all alternatives. Quantification of the overestimation of impacts for each alternative would require a detailed analysis and field verification that, as previously stated, is inappropriate for this level of documentation.

Comparison of Alternatives by Region: Bakersfield to Los Angeles: The names and status of federal and state listed threatened and endangered species are provided in the Biological Resources Technical Report. The CNDDDB was considered the most accurate and up to date source of information available for analysis. Section 3.15.1 B (Method of Evaluation of Impacts) and Appendix 3.15-C disclose the limitations of the CNDDDB. As previously stated, the level of analysis provided in Section 3.15 (Biological Resources and Wetlands) is appropriate for program-level of documentation. Detailed analysis of potential impacts will be provided in a project level document, or some form of subsequent analysis.

Spoil locations and their corresponding impacts to biological resources will be evaluated in the subsequent level of analysis. It is likely that spoil locations will be limited to disturbed or non-native conditions to minimize impacts to the natural environment. However, these specifics will be addressed in the more precise construction-level document. The same applies to dewatering, tunnel feasibility and methods of construction will be addressed to

help ensure springs and watercourses are not appreciably impacted and likely monitoring and contingency mitigation would apply.

Potential streambed impacts are provided in linear feet because an estimate of the acreage would require field verification of the widths of all waters. This detailed level of analysis and field verification is not required because, as stated in Section 1.1 (Introduction) on page 1-2 of the Program EIR/EIS, “No permits will be sought in this phase of the environmental review.” To conduct detailed field investigations to ascertain specific acreages for waters is not reasonable, appropriate, or necessary at this time and would result in speculative estimates considering the data that is available. Delineation of waters and wetland will be conducted for those alignment alternatives that are moved forward in the planning process and are considered to be potentially practicable consistent with the Clean Water Act permitting process. For this analysis, linear feet are a more reasonable measuring parameter and are used, to the extent feasible, consistently for each alternative. This approach provides a relatively consistent method across the alternatives for comparative purposes. Please see discussions of “design practices”, and mitigation strategies in Chapter 3 and construction methods in Section 3.18 of the Final Program EIR/EIS.

The disparity in the Draft Program EIR/EIS between the linear feet of non-wetland waters (streambeds) reported in the Biological Resources section and the linear feet of streams reported in the Hydrology and Water Resources Section can be explained by the use of different study area widths used to calculate impacts along the various Alternatives. As stated in Section 3.14.2 A (Study Area Defined), the study area for hydrology and water quality resources “is defined as 1) the area within 100 ft (30 m) of the centerline of the proposed HST Alternative alignments and within 100 ft (30 m) of the direct footprint of the proposed station facilities; and 2) the area within 100 ft (30 m) of the Modal Alternative direct corridor footprint and direct footprints of facilities, including corridors and facilities that would undergo upgrades/expansions.” As stated in Section 3.15.2 A (Study Area Defined), the potentially affected area for the Bakersfield to Los Angeles “region was 0.5 mi (0.8 km) on either side

of highway and rail corridors and around stations.” The potentially affected area for biological resources is much larger than the study area for hydrology and water resources therefore the impacts to non-wetland waters/streams calculated in the biological resources section were much larger than those in the hydrology and water resources section. LEDPA for Waters of the U.S.: As stated in Section 1.1 (Introduction), on page 1-2, of the Program EIR/EIS, “No permits will be sought in this phase of the environmental review.” Therefore, the level of detail and analysis required for a LEDPA determination is not required within this document.

A program-level environmental document should provide sufficient relative detail for each alternative for comparison purposes in determining the potential environmental consequences of each considered. A program-level document is not used to permit a project and is not a project EIR or construction-level EIS. Detailed protocol survey or delineations are not appropriate at this level of analysis, particularly considering the specificity and certainty of the engineering and project description information available. It is anticipated that the program-level document provides decision makers with a comparative evaluation with the understanding that a subsequent document will address the proposed project to a level of detail consistent with the protocol needed to obtain relevant permits from state and federal agencies. The methods used for the Program EIR/EIS were defined with this tiered approach in mind.

Additional Comments: The criteria are intended to apply to impacts that may substantially impact a population, to the extent, that the numbers and genetic variability would potentially be at risk.

The Draft of Final Tejon Corridor HCP and other appropriate documentation will be analyzed in relation to the proposed plan/project at the project level.

#### *Biological Resources and Wetlands Technical Report*

Biological Resources General Comments: As previously stated, the level of analysis provided in Section 3.15 (Biological Resources and Wetlands) is appropriate for this level documentation. The limitations of the data sources used (which account for both gaps

and overestimations of impacts within the analysis) were disclosed in Section 3.15.1 B (Method of Evaluation of Impacts) of the Program EIR/EIS. A detailed study and field verification of all available data will be conducted and the exact nature and quantification of impacts including acres of wetlands and waters, acres of critical habitat and numbers/acres of state and federally listed species and habitats will be disclosed in the project-level document should the Authority decide to proceed with a HST Alternative.

Wildlife Movement/Migration Corridors: As stated in Section 1.1 (Introduction) on page 1-2 of the Program EIR/EIS, the HST program is in the “conceptual stage of planning and decision-making.” The ROW is not known with specificity and modifications to the general alignments are likely during the various stages of design. It is also anticipated that minor modifications can be made to the alternatives to avoid potentially significant impacts to wildlife movement. In combination with these modifications, a detailed mitigation and monitoring plan for significant impacts will reduce impacts to wildlife movement, although at this stage of planning it is too speculative to address due to the level of engineering currently available. Regardless some mitigation strategies related to wildlife movement are discussed in Section 3.15.5, on pages 3-15-30 and 3.15-31, in the Program EIS/EIR. Also see Section 3.15 regarding systemwide consideration of wildlife corridors, which has been added to the Final Program EIR/EIS. On page 82 of the Biological Resources Technical Evaluation, it states “Impacts to regional wildlife movement/migration corridors identified in the California Wilderness Coalition 2000 report were determined by noting which corridors are crossed by a segment and the planned construction type for the crossing.” The analysis did not intent to go into detail about specific local movement patterns; such as the ones described in the comment, but did discuss the crossing of the particular corridor with the linkage. The crossing of a linkage represents a potential barrier to wildlife movement. Localized dispersion corridors, existing bridges, culverts or engineering barriers were not considered in the analysis at this stage of environmental planning. Certainly, at a construction level of environmental documentation and during the future permitting processes, specific movement patterns, land use

considerations, regional open space plans and detailed discussions pertaining to wildlife fencing, funneling movement to crossings, fencing location and specifications, wildlife habitat replanting, bridges, culverts and nighttime lighting will all be considered.

Section 3.2 Significance Criteria for Biological Resources: The significance criteria in Section 3.2 (Significance Criteria for Biological Resources) are consistent with those in Section 3.15.1 C (Significance Criteria for Biological Resources) in the Program EIS/EIR. Criteria points one and two in the Technical Report have been incorporated as point one in the Program EIS/EIR. Criteria point three in the Technical Report has been incorporated as point two in the Program EIS/EIR. Criteria point four in the Technical Report has been incorporated as points three, four and five in the Program EIS/EIR.

Section 3.3 Impacts Assessment: With the steel liner, it is probable and appropriate to assume that tunneling will have limited impacts on groundwater or dewatering of surface waters, resulting in substantive impacts to groundwater dependent vegetation.

The comment cites the MWD Inland Feeder tunneling project. As a point of clarification, the Inland Feeder Project is located in the San Bernardino National Forest, not the Cleveland National Forest. The EIR/EA for the Inland Feeder Project had a very comprehensive mitigation monitoring program, including extensive water quality and groundwater monitoring protocol that defined the groundwater baseline prior to construction, instituted surface water flow

measurements and later provided extensive biological monitoring throughout the mountain range to report on any anomalies during construction. The monitoring program did identify one location where dewatering had an influence on the riparian reach and contingency measure was triggered to sustain the biotic components at this one location. During this same time frame MWD ceased mining and supplemented the design with a new tunnel boring machine and lining technique to avoid substantive groundwater intrusion into the tunnel. Similar technology can be used during HST tunneling to avoid these impacts as well. In the event that these impacts are anticipated in project-level reviews, appropriate mitigation and monitoring will be required and implemented.

Section 4.2 Modal Alternative: Refer to the response to "Biological Resources General Comments" above.

**O056-15**

See Standard Response 3.17.1

**O056-16**

Please see standard response 5.2.4.

## Comment Letter 0049 Continued

### a. Bakersfield to Sylmar (Tehachapi/ Antelope Valley)

Wilderness areas in and adjacent to this section of the alignment include Sierra and Angeles National Forests, as well as Magic Mountain and Pacifico Potential Wilderness areas. Concerns through this section include impacts to linkages, roadless areas, potential wilderness areas, wetlands, and threatened and endangered species. For wide-ranging species such as black bear, mountain lion, deer, and bobcat, habitat fragmentation and death due to train strikes is a major concern in this section. In the Santa Clara River area of the proposed alignment, the Southern California Evolutionary Significant Unit for steelhead is intersected and thus impacted.

#### Wildlife movement corridors impacted:

- CV 2: The South End San Joaquin Valley corridor is a landscape linkage for the San Joaquin kit fox, blunt-nosed leopard lizard, short-nosed kangaroo rat, and LeConte's thrasher. The alignment crosses this corridor at the SR-58 corridor and I-5 Tehachapi corridor subsections.
- SN 10: The Southern Sierra Checkerboard corridor is a landscape linkage for deer, bear, mountain lion, and bobcat. The alignment crosses this corridor along the SR-58 corridor subsection in two locations.
- DE 12: The San Gabriels/Tehachapi corridor is a missing linkage for movement of desert wildlife in general. The alignment crosses this corridor along the SR-58 corridor subsection.
- SC 113: The Soledad Canyon/ Mint Canyon corridor is a choke-point for the movement of large mammals, three-spine stickleback, southwest willow flycatcher, and western spadefoot toad. The alignment crosses this corridor at the Soledad Canyon corridor subsection in three locations.
- SC 111: The Highway 5/Newhall Pass corridor is a landscape linkage and choke-point for the movement of mammals in general. The alignment crosses this corridor at the I-5 Tehachapi corridor and Soledad Canyon Corridor subsections.

### b. Bakersfield to Sylmar (I-5 route) route:

Wilderness areas in or adjacent to this section of alignment include Los Padres and Angeles National Forests, and Sespe Wilderness. Potential wilderness areas include Antimony, Redrock Mountain, Salt Creek, San Francisquito, Magic Mountain, and Tule. Other undeveloped areas in the vicinity include Wind Wolves Preserve (owned by Wildlands Conservancy) and Tejon Ranch. Major concerns in this section are impacts to linkages and habitat fragmentation. Wide-ranging animals may be affected by fragmentation of habitat and train strikes.

#### Wildlife movement corridors impacted:

- CV 2: The South End San Joaquin Valley corridor is a landscape linkage for the San Joaquin kit fox, blunt-nosed leopard lizard, short-nosed kangaroo rat, and

LeConte's thrasher. The alignment crosses this corridor at the SR-58 corridor and I-5 Tehachapi corridor subsections.

- SN 17: The Southern Sierra corridor is a choke-point for the movement of deer, bear, and mountain lion.
- SC 12: The Castaic Highway 5 corridor undercrossing addresses a choke-point for mammals. The alignment crosses this corridor at the I-5 Tehachapi corridor subsection.
- SC 60: The Santa Clara River corridor is a landscape linkage for fish and birds. The alignment crosses this corridor at the I-5 Tehachapi corridor subsection.
- SC 111: The Highway 5/Newhall Pass corridor is a landscape linkage and choke-point for the movement of mammals in general. The alignment crosses this corridor at the I-5 Tehachapi corridor and Soledad Canyon Corridor subsections.

### c. Sylmar to LA Route:

#### Wildlife movement corridors impacted:

- SC 115: The Griffith Park/Verdugo Hills corridor is a missing linkage for large mammals. The alignment crosses this corridor at the Metrolink/UPRR: Burbank Downtown Si and I-5: Glendale subsections.

### 4. LA to San Diego Route:

Major concerns through this section of the state include impacts to linkages, threatened and endangered species, vernal pools, and coastal streams and lagoons. Roadless or wilderness areas include Penasquitos Canyon and Carmel Mountain Preserve. Public or protected lands include state beaches (Doheny, San Clemente, San Onofre) and San Diego National Wildlife Refuge. Within the UC Riverside area, there may be a loss of local open space and impacts to species such as Stephens' kangaroo rat and Santa Ana sucker. Extensive consultation with CDFG and FWS would likely be necessary for impacts through this area. In southern Orange County, creek crossings along this alignment could result in impacts to steelhead migration. Construction could affect vernal pools on Camp Pendleton. Within the Inland San Diego County section, there are extensive vernal pool complexes adjacent to I-15 and SR-52 corridors that could be impacted by construction.

Within the coastal San Diego County section the alignments have a high potential to impact all coastal lagoons in the area. In addition, it is important to maintain connectivity between these coastal lagoons and inland open space for predators. Rare southern maritime chaparral communities (e.g., Del Mar manzanita and wart-stemmed ceanothus) are found on sandstone bluffs in this area and could be impacted by the proposed project.

### a. LA Union Station to March ARB Alignment

#### Critical habitat impacted:

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**Comment Letter 0049 Continued**


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- San Bernardino Kangaroo Rat critical habitat will be most impacted by Subsegment 1C1.
- California gnatcatcher critical habitat will be impacted by Segment 1B1 > 1A1.

**Wildlife migration corridors impacted:**

- SC 201: The San Gabriel River corridor is a missing linkage for the river channel. The alignment crosses this corridor at the UP/Colton 1 and UP/Riverside line subsections.
- SC 203: The Puente/San Jose/San Gabriel corridor is a missing linkage and choke-point for large carnivores, raptors, songbirds, and other furbearers. The alignment crosses this corridor at the UP/Colton 1 and UP/Riverside line subsections.
- SC 206: The Lytle Creek Drainage corridor is a landscape linkage and choke-point for the river channel. The crosses the corridor at the UP/Colton line to San Bernardino subsection.
- SC 207: The Santa Ana River corridor is a landscape linkage for the Santa Ana sucker, least Bell's vireo, southwest willow flycatcher, and San Bernardino kangaroo rat. The alignment crosses this corridor at the UP/Colton 3 and UP/Colton line to San Bernardino subsections.

## b. March ARB to Mira Mesa Alignment:

**Critical habitat impacted:**

The alignment will impact critical habitat for the following species: Arroyo toad, California gnatcatcher, Quino checkerspot butterfly, Southwestern willow flycatcher, and vernal pool species. These impacts must be analyzed.

**Wildlife migration corridors impacted:**

- SC 225: The San Jacinto River corridor is a landscape linkage for coyote and rare plants. The alignment crosses this corridor at the San Jacinto to I-5 subsection.
- SC 230: The Tualota Creek corridor is a choke-point for the movement of coastal California gnatcatcher and Los Angeles pocket mouse. The alignment crosses this corridor at the San Jacinto to I-5 subsection.
- SC 228: The Pechanga Corridor is a landscape linkage for mountain lion, deer, and bobcat. The alignment crosses this corridor at the San Jacinto to I-5 subsection.
- SC 4: The San Luis Rey corridor is a choke-point for the movement of large carnivores, deer, and steelhead. The alignment crosses this corridor at the San Jacinto to I-5 subsection.
- SC 3: The San Dieguito River corridor is a choke-point and main corridor for large carnivores and deer. The alignment crosses this corridor at the San Jacinto to I-5 subsection.
- SC 1: The Penasquitos Canyon and Carmel Mountain Preserve corridor is a choke-point for the movement of large carnivores and deer. The alignment crosses this corridor at the San Jacinto to I-5 subsection.

## c. Mira Mesa to San Diego Alignment:

**Critical habitat impacted:**

- Riverside fairy shrimp critical habitat will be impacted by the Mira Mesa to Qualcomm stadium alignment.

**Wildlife migration corridors impacted:**

## Miramar Road to San Diego

- SC 2: The San Diego River corridor is a choke-point for the movement of large carnivores, deer, and steelhead. The alignment crosses this corridor at the SR-52 to Santa Fe Depot subsection.

## Anaheim to Irvine

- SC 220: The El Toro Linkage corridor is a missing linkage for coyote. The alignment crosses this corridor at the Fullerton to Irvine subsection.

## Irvine to Oceanside

- SC 222: The Oso Creek corridor is a choke-point for bobcat, coyote, and songbirds. The alignment crosses this corridor at the San Juan Cap Trench and San Juan Cap I-5 subsections.

## Oceanside to San Diego

- SC 3: The Dieguito River corridor is a choke-point and main corridor for the movement of large carnivores and deer. The alignment crosses this corridor at the Encinitas to Solana Beach subsection.
- SC 1: The Penasquitos Canyon and Carmel Mountain Preserve corridor is a choke-point for the movement of large carnivores and deer. The alignment crosses this corridor at the I-5/I-805 split to SR-52 and Miramar Hill Tunnel subsections.
- SC 2: The San Diego River corridor is a choke-point for the movement of large carnivores, deer, and steelhead. The alignment crosses this corridor at the SR-52 to Santa Fe Depot subsection.

## II. Adequacy of mitigation measures

- A. The DEIR/EIS fails to adequately discuss the adequacy of overpasses and underpasses to facilitate species movement.

Yanes et al. (1995) studied vertebrate movement through 17 culverts under roads and railroads in Central Spain. The results of this study indicate that animal movement was dependent on culvert dimensions, road width, height of boundary fence, the complexity of the vegetation along the route, and the presence of detritus pits at the entrance of culverts. The construction of underpasses and overpasses is a nascent effort. The

## Comment Letter 0049 Continued

DEIR/EIS contains only a fleeting discussion of this issue without any citation to scientific literature. This section needs significant expansion and detailed discussion of the issues involved in the siting and construction of overpasses and underpasses.

The following are some additional underpass/overpass issues that should be incorporated in the mitigation discussion:

- To reduce collision, fences should be checked, repaired, and built high enough, and vegetation should be kept down so that wildlife is not attracted to the railway.
- Wildlife crossings should be installed at a frequency of one every 1-3 km in areas where there are large animals, regardless of how many large animals are observed, and one every 5-10 km where there are no large animals but the habitat is favorable for them. Because these animals follow traditional routes, success depends greatly on the location of the passage. The crossing should be built on the exact site of the interrupted path if it is to be really effective. The restoration level should be as near as possible to the natural ground level; however, connecting gradients does not make the structure ineffective.
- Underpasses are effective only if they are large enough and properly landscaped.
- Planting trees along the lines, the tops of which would be at least the same level as the top of the pylons, can reduce the risk of collision for some bird species.
- For amphibians, some of the compacted ballast under the rails should be removed, and prefabricated corridors should be installed under the rails. For tortoises, netting should be buried 10 cm deep alongside a rail to direct them to a passageway.
- Vegetation in edge zones that is attractive to ungulates should be removed. Elimination of vegetation from railway verges makes it easier to see animals alongside the railway and limits their presence by not attracting them.
- Reflective mirrors, repellents, ultrasound, and road lighting are not effective in reducing collisions.

See COST – European Co-operation in the Field of Scientific and Technical Research. 2000. Habitat fragmentation due to transportation infrastructure. COST 341, French state of the art report

### 1. San Joaquin Kit Fox:

Underpasses are the preferred crossing structure for SJKF and should be at least 0.5m high and 0.5m wide. Also, in order to maintain normal daily movement patterns, underpasses should be placed every 0.5km. Exclusionary fences should be used to encourage foxes to use the crossing structures (Bjurlin 2003). Fencing should be buried in the ground deep enough that coyotes, foxes, and other digging animals cannot dig under them and enter the tracks. Artificial dens and dens to escape predators should also be incorporated alongside the tracks in San Joaquin kit fox habitat.

B. Numerous reasonable mitigation measures were not even discussed in the DEIR/EIS.

The DEIR/EIS discussion of mitigation was so cursory that it failed to include the following potential mitigation strategies:

- ii. Speed of operation
- iii. The preference to construct rail lines along existing roads only
- iv. The installation of wildlife warning devices
- v. Reduced train speed in wildlife areas or during times in which wildlife are active (e.g., May for bears).
- vi. Carcass removal to decrease attraction for carnivores and scavengers.
- vii. Clean up of any spilled grain or food attractants.
- viii. Reduce vegetation that is attractive to wildlife
- ix. Minimizing fragmentation and/or maximizing the ration of areas of fragments.
- x. Narrowing travel corridors.
- xi. Insulation of catenary suspension wire.
- xii. Oversizing of insulators to discourage perching by birds.

These are just a few of the mitigation options that should be discussed in the DEIR/EIS.

Again, biological impacts of the high speed train will vary considerably based on alignment. Yet, the DEIR/S does not provide the information necessary to evaluate these differences. The analyses suggested above, which are technically feasible, must be performed in advance of alignment decisions.

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vertebrates: the importance of culverts. *Biological Conservation*. 71: 217-222.

**Attachment D**

## Comment Letter 0049 Continued

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**SLOSSON AND ASSOCIATES**  
CONSULTING GEOLOGISTS  
15500 Erwin Street, Suite 1123  
Van Nuys, California 91411  
(818) 376-6540 • (818) 785-0835  
FAX (818) 376-6543

August 31, 2004  
S&A #041013

TO: Eddy Moore  
Senior Project Manager  
Planning and Conservation League Foundation  
926 J Street, Suite 612  
Sacramento, California 95814

SUBJECT: Engineering Geology Review of "Draft Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System" prepared by the California High-Speed Rail Authority and the Federal Railroad Administration

This office has reviewed the Geology and Soils section of the Draft EIR/EIS (Section 3.13) as well as the Hydrology and Water Resources section (Section 3.14), and any of the attached figures, as well as the reference list for these items (Sections 12.15-12.16). Additionally, this office also reviewed the following document titled "Bay Area to Merced, Geology & Soils Technical Evaluation" prepared by Parsons and Geotechnical Consultants, Inc, dated January 2004:

Based on the review of these documents, knowledge of the overall geology, and having been in projects that involved tunneling, preliminary investigations, actual grading experience, groundwater (both regional and local) and bedrock fracturing, faulting and joints, the following comments are provided for your consideration. While the Draft EIR/EIS is done on a preliminary basis, or overview, the items below need to be addressed "prior to the selection of high speed rail alignments" because, depending on alignment selection, they will have differing impacts on the environment, as well as on the design, construction, and cost of the proposed railway.

- Nowhere in the Draft EIR/EIS does it discuss the environmental impacts that would occur as a result of the geological and geotechnical preliminary investigations that would be needed to further refine any of the proposed routes through the Pacheco Pass, Northern Tunnel, Under Park Tunnel, and Minimize Tunnel. The proposed routes through the Diablo Ranges are in wilderness areas or in steep and remote areas with very limited access. In order to properly understand the complex geology that occurs in these areas, extensive subsurface exploration will be needed. Without a proper understanding of the subsurface

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conditions there is a very high potential for life safety and construction hazards to occur during construction, as well as not allowing for the proper engineering due to lack of data. The hazards could include caving, weak and highly faulted areas that could be quite wide, as well as high local groundwater caused by the offsets of fracturing, faulting and secondary permeability and porosity which will be higher than the primary permeability and porosity. There could also be gases and other hazards. In order to verify these subsurface conditions, there would be an extensive array of borings, especially in the wide faulted areas. The need for this subsurface exploration would mean that there would need to be access roads cut in these steep, remote inaccessible locations, and deep borings with side cast materials piled in the area of the borings. There should also be geophysical lines run across these areas to further verify the unknown and very complex geologic conditions.

It should be understood that in order to perform the necessary subsurface explorations, access roads will need to be cut by track-mounted bulldozers along the proposed routes so that boring equipment of varying sizes can have access to the route to perform the subsurface exploration. The only other option would be to helicopter in any of the drilling rigs, but this can be a very costly, hazardous endeavor. In either case, drill rigs would still be adversely impacting the environment where the drilling takes place.

- The Los Angeles subway project encountered many unexpected problems due to a lack of proper subsurface investigation data. The work done by the Independent Technical Review Committee for the Los Angeles Metro Rail Project documented many of these problems. The Independent Technical Review Committee was established and appointed by Congressman Henry Waxman and Congresswoman Bobbi Fiedler to study the Metro Rail Project and report its findings in 1984. The study was finalized by the Committee under the chairmanship of George W. Housner, Professor Emeritus, Caltech. The Committee was very critical of the work completed by the consultants for Metro Rail. Dr. James E. Slosson was a member of the Congressional Committee that penned the document. One of the many problems was the effect on local groundwater and dewatering of the tunnels.
- It is unclear why the Altamont Pass route has not been considered further from a geological and geotechnical viewpoint. This route has existing roads, pipelines and other features. The fact that there are roads, pipelines and other structures would indicate that a certain knowledge of the surface and surface geology of the area is available. Additionally, there are existing access roads for any equipment needed to perform the subsurface exploration. This would greatly minimize the environmental impact to the area as compared to the investigations into the steep, rugged, non-accessible areas of the other proposed routes, including the Henry Coe State Park. The Altamont Pass route, per Appendix 2-H-3 of the report, indicates that it has the same "maximize Avoidance of Areas with geologic and

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Soils Constraints" as do the Pacheco Pass and the Panocho Pass routes (a rating of 3 for all of the routes). It is unclear if the rating of 3 should be given to all routes when there is no data. It is possible that the Altamont route might have a better rating geologically and the other routes may have a poorer rating when all the data is collected.

- Currently, there is not enough data to correctly establish what the environmental impact may be on the local groundwater of the proposed routes. On Page 3.14-5, under the heading of Groundwater, it states "Shallow groundwater is subject to potential impacts from dewatering during construction." Based on past experiences of this office, and other tunneling projects, there can be a very noticeable and negative impact on the local groundwater, springs, seeps and quality of water. Based on the fault zones or faulted areas that the routes will be crossing or going through, there is a definite potential for impacts on the groundwater. The faults can act as groundwater barriers with water higher on one side of the fault as compared to the other. The fractures and joints, or higher secondary porosity and permeability of the bedrock, will allow water to move quickly through these broken and sheared materials. Without water and groundwater data collected during field and subsurface exploration (as discussed above) there is no way to correctly and adequately understand the local groundwater and what adverse environmental impact any tunneling will have on the local groundwater. It is possible that the drawdown of water during or as a result of construction will have a long-term effect on the local groundwater levels, springs, seeps and water quality, which has not been addressed. There have been recorded adverse effects caused by dewatering as well as changes of seepage forces.
- The DEIR/S does not discuss potential environmental impacts related to disposal of any groundwater which is encountered during any proposed tunneling. There will be a need to dewater portions of the excavations to maintain safety for the workers, as well as post construction to maintain safety of the tunnels. There needs to be consideration of the potential for localized and currently unknown adverse seepage forces affecting the tunnel walls. While the exact amount and location of the groundwater is unknown, as indicated above, the dewatering will have some impact on the environment. The water from the dewatering may well have sediment and a different water quality than the surface waters. Any mixing of these waters will impact the environment. This impact needs to be discussed.
- The Draft EIR/EIS indicates that the proposed routes through the Diablo Mountains will intersect two active faults. It should be understood that these "active faults" are typically a zone of faulting with many splays and subplays of the main fault. These zones can be very wide and have a direct impact on the tunnel construction, slope and tunnel stability, and local groundwater. Additionally, the geologic maps for the area, from the State fault map and the

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State geologic map, the Santa Cruz Sheet, Geologic Map of California, and the San Jose Sheet of the Geologic Map of California all show multiple faults which would intersect the proposed alignments or routes. The Draft EIR/EIS primarily only focuses on the active and potentially active faults. It does not include all of the "nonactive" faults the alignments cross. Will these faults have potential hazards of focusing energy from other earthquake faults, water, cracks, highly-sheared materials, etc. All of these faults need to be addressed as far as hazards in construction, post-construction, etc. Currently, they are not addressed in the Draft EIR/EIS. These multiple faults can have an impact on the construction of the alignments, be it tunneling, cuts at grade, fills, or other construction. Any impacts on the construction for the alignments will impact the environment somehow, especially if the conditions are unknown as discussed in the items above. If these faults are not considered and investigated there will be problems with the design and construction. Any problems with the design and construction will lead to time delays, cost overruns, hazards and impacts on the environment.

- It appears from the maps that the Hayward fault, the Silver Creek and the Calaveras fault all blend together in the area of the proposed alignments for Pacheco Pass, Northern Tunnel, Under Park Tunnel, and Minimize Tunnel options and, as such, the zone of faulting is probably quite wide in this area. Again, the Draft EIR/EIS is not complete in this regard as it indicates that the alignments cross only two active faults, the Calaveras fault and the Ortigalita fault. The extensive shearing will create adverse conditions that will impact the construction and the environment.
- Another item is the potential for explosive or hazardous gases in the area of the multiple fault zones. The multiple faults may very well have the potential for explosive and toxic gases along them. If this is not investigated completely it may well have a very adverse impact on life safety for construction as well as during the life of the project, which will have an adverse environmental impact. Again, this points to the need for extensive subsurface exploration and testing along the alignment routes. This exploration will have a very definite impact on the environment and has not been discussed.
- From a review of the State of California Seismic Hazard Mapping Program as conducted by the State Geologist's office, it does not appear that much of the area for the tunnel routes for Pacheco Pass, Northern Tunnel, Under Park Tunnel and Minimize Tunnel through the mountains is adequately mapped by the State. This does not mean that there are no seismic/geologic/hydrologic and possible existence of natural gases, only that the hazards have not been mapped and identified by the State. The firm of Slosson & Associates has been involved in studies of the Tehachapi earthquake and the damages incurred on the Tehachapi rail tunnel from the 1952 Kern County earthquake which severely damaged the tunnel and destroyed the track, the 1971 Sylmar tunnel explosion which was caused by



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natural gas leaking into the tunnel excavation killing 17 workmen, the problems related to construction of the Sepulveda Metropolitan Water District Water Tunnel, and other construction difficulties related to construction of water tunnels. Based on a knowledge of the area, there are many seismic hazards in the region.

Consideration should be given to utilizing the current edition of "Department of Transportation California Seismic Hazard map 1996 Based on Maximum Credible Earthquakes" Prepared by Caltrans Office of Earthquake Engineering and Design Support by Lalliana Mualchin, Engineering Seismologist. The most recent revised version of this map is shown to be Plot Modified July 2004. This map should be utilized for the magnitude and acceleration for each of the active and mapped faults and the impact it may have on the design and construction. Additionally, as indicated above, the other numerous faults that are not active and are not discussed in the Draft EIR/EIS will have definite impacts on the routes and will act as local controls for any seismic distress in the area from any earthquake. As was seen in the 1994 Northridge earthquake, other existing nonactive faults and active faults can focus energy along them leading to increased localized damage and distress within those fault zones.

These items need to be considered and addressed prior to approval of the Draft EIR/EIS as they will have a definite impact on the environment, construction and design of the proposed routes.

*James E. Slosson*  
James E. Slosson  
Chief Engineering Geologist  
R.G. #46, C.E.G. #22, G.P. #829

*Thomas L. Slosson*  
Thomas L. Slosson  
Supervising Engineering Geologist  
R.G. #4204, C.E.G. #1327

JES:TLS:cg  
Ref:cgip.EIR/EIS

**JAMES EDWARD SLOSSON**

EDUCATION

1949	AB, Geology, University of Southern California
1950	MS, Geology, University of Southern California
1958	Ph.D., Geology, University of Southern California (Equivalency of minors in Geography, Engineering, Physical Science, and Social Science)
1957	Certificate of Completion, University of Illinois/National Science Foundation Grant
1959-1968	Post-Ph.D. studies, University of Southern California

PROFESSIONAL REGISTRATION

California	Registered Geologist No. 46 Certified Engineering Geologist No. 22 Registered Geophysicist No. 829 Registered Environmental Assessor No. REA-01849
Alaska	Registered Geologist No. 223
Arizona	Registered Geologist No. 8711
Arkansas	Registered Geologist No. 332
Delaware	Registered Geologist No. 134
Georgia	Registered Geologist No. 198
Idaho	Registered Geologist No. 104
North Carolina	Registered Geologist No. 332
Oregon	Registered Geologist No. G102
Oregon	Registered Engineering Geologist No. E102
Tennessee	Registered Engineering Geologist No. TN0633
Washington	Registered Engineering Geologist No. 971
Wyoming	Professional Geologist No. 733
Certified	Professional Hydrogeologist No. 933 American Institute of Hydrology

Chief Administrative Officer Credential, Community Colleges, State of California

Professor Emeritus, Los Angeles Valley Community College



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James E. Slosson

[2]

**CIVIL SERVICE RATINGS ACHIEVED**

1949 State Park Ranger, California  
 1949 Soil Scientist, U.S., GS-5  
 1950 Minerals Analyst, U.S., GS-7  
 1950 Oceanographer, U.S., GS-7  
 1951 Military Intelligence Research Specialist, GS-7  
 1952 Assistant Engineering Geologist, California  
 1956 Geologist, U.S.G.S., GS-9  
 1956 Geophysicist (Seismology) GS-9  
 1957 Geologist, Federal Power Commission, GS-9  
 1958 Associate Engineering Geologist, California  
 1958 Geologist, Fuels U.S.G.S., GS-11  
 1959 Geologist, Fuels U.S.G.S., GS-12  
 1966 Engineering Geologist, U.S.G.S., GS-14  
 1973 Deputy State Geologist, California  
 1973 State Geologist, California

**PROFESSIONAL BACKGROUND AND EXPERIENCE**

1975-present Slosson and Associates  
 15500 Erwin Street, Suite 1123  
 Van Nuys, CA 91411  
 (818) 376-6540

**Chief Engineering Geologist:** Involved in engineering geology, seismic studies, forensic geology, groundwater, mineral resource search, energy resource investigation, data interpretation, geology/medicine, hazard mitigation and prevention, soil erosion abatement, legislative analysis and preparation.

1984-present **Professor Emeritus:** Los Angeles Valley College

1975-1984 **Professor of Geology:** Los Angeles Valley College  
**Chairman:** Earth Science Department (1950-1965)  
 Rank of Full Professor of Geology (on leave for State service 1973-1975)

1974-1983 **Lecturer:** University of Southern California, School of Public Administration, Environmental Management Institute

James E. Slosson

[3]

1974-present **Guest Lecturer:** Many colleges and universities including University of California at Los Angeles, Berkeley, Davis, Riverside, Irvine; California Institute of Technology; California State University at Los Angeles, Northridge, Fullerton, Long Beach; Occidental College; University of Arizona; Portland State University; Texas A&M; University of Wisconsin; and others

1973-1975 **State Geologist/Chief of Division of Mines and Geology,** State of California

1973 **Chief Deputy State Geologist,** State of California

1970-1977 **Lecturer:** Harvard University, Graduate School of Design, summer short courses in land-use and terrain analysis

1969 **Instructor:** University of California at Los Angeles, Extension Division, visiting instructor

1964 **Assistant Professor of Geology:** University of Southern California, Department of Geological Sciences, visiting instructor, summer program

1958-1973 **Consulting Geologist:** Over 3,000 professional projects utilizing multi-disciplines within geologic technology

1957 **National Science Foundation Grant:** University of Illinois, Program in Mineralogy and Geology, summer program

1952-1956 **Research Geologist:** Gulf Oil Corporation (summers and 50% workload during academic year); research utilized for dissertation

1951, 1958 and 1959 (summers) **Engineering Geologist:** Department of Water and Resources, State of California

1950-1973 **Professor of Geology:** Los Angeles Valley College

1949-1950 **Geologist:** United States Geological Survey (rating of GS-14 as of 1966), (W.A.E. for Master's Thesis)

1948-1949 **Laboratory Instructor:** University of Southern California, Geology Department

1943-1945 **Second Lieutenant:** United States Army, Athletic Instructor, Infantry Platoon Leader, and Aerial Observer

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James E. Slosson

[4]

**PROFESSIONAL ORGANIZATIONS**

American Association of Petroleum Geologists  
 American Geological Institute  
 American Geophysical Union (Recipient, silver award)  
 American Institute of Professional Geologists, Certificate #1109  
 American Society of Civil Engineers (Life Member)  
 Association of Engineering Geologists (Honorary Member)  
 Association of State Floodplain Managers  
 Earthquake Engineering Research Institute (Fellow)  
 Geological Society of America (Fellow)  
 National Association of Geology Teachers (Emeritus)  
 Seismological Society of America  
 Sigma Gamma Epsilon  
 Sigma Xi  
 Society of Economic Paleontologists and Mineralogists (Emeritus)  
 Structural Engineers Association of Southern California

**PROFESSIONAL AWARDS**

American Institute of Professional Geologists, John T. Gayley, Sr. Memorial Public Service Award, 1997  
 Geological Society of America, E.B. Burwell, Jr., Award for the Publication of *Forensic Engineering*, 1996  
 Geological Society of America, Roy Shlemon Applied Geology Mentor (Initial Awardee), 1996  
 Association of Engineering Geologists, Honorary Member Award, 1995  
 Geological Society of America Distinguished Practice Award, 1992  
 American Society of Civil Engineers, Life Member, 1991  
 Geological Society of America, Richard H. Jahns Distinguished Lecturer in Engineering Geology, 1989 University Lecture Series  
 Outstanding Educators of America Award, 1970  
 American Geophysical Union, Silver Award

James E. Slosson

[5]

**PROFESSIONAL ACTIVITIES**

Geologist: County of Modoc, 2000  
 Participant: USGS Landslide Section, FY 1993-1994, Landslide Program Planning, Golden, Colorado  
 Subcontractor: FEMA Disaster Response Team, 1992  
 Consultant: Superior Court, County of Los Angeles, assigned to Judge Philip F. Jones, Advisor for Remedial Work, CRA Project, Monterey Hills, 1991-present  
 Commissioner: California Seismic Safety Commission, representing engineering geology, appointed by Governor Pete Wilson, 1991-1999  
 City Geologist: City of Moorpark, 1991-1996  
 City Geologist: City of Calabasas, 1991-1993  
 City Geologist: City of Corona, 1991-1993  
 Member: National Academy of Sciences, Advisory Committee on Hazards and Municipal Liability, 1990  
 Chairman: Superior Court, County of Los Angeles, assigned to Abalone Cove Landslide Abatement District, City of Rancho Palos Verdes, 1988-1994  
 Member: Task Committee on Flood Hazard Analysis on Alluvial Fans, ASCE, 1989  
 Member: National Research Council, Committee on Ground Failure Hazards, 1986- 1992  
 Guest Instructor: Slope Stability and Landslides at 7th National Technical Course, College of Engineering, University of Wisconsin - Madison, 1987  
 Member: Workshop on the "Use of Natural Hazards Research Results" at George Washington University, National Science Foundation, June 1 and 2, 1987  
 Technical Consultant: Expert Witness, City Attorney's Office, City of San Diego, 1987-present

**Comment Letter 0049 Continued**

James E. Slosson [6]

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Chairman: FEMA/Colorado Department of Public Safety Advisory Committee, Landslide Hazard Mitigation Project, 1986-1989

Member: AAPG Ad Hoc Committee on Opportunities in Water Resources and Water Management, 1986-1988

City Geologist: City of Monterey Park, 1986-1991

Session Chairman: ASCE, Hydrology Annual Conference, "World Water Issues in Evolution" at Long Beach, 1986

Member: Fairfax-Wilshire Task Force Committee, 1985 (Appointed by the Los Angeles City Council)

Member: Independent Technical Review Committee for the Los Angeles Metro Rail Project -- Congressional Select Review Committee, 1985 (Appointed by Congressman Waxman and Congresswoman Fiedler)

Session Chairman: University of Southern California Conference and Workshop on "Seismic Mitigation Management for Seaports," May 1985

Coordinator: ASCE/OES Disaster Preparedness Committee; 1983-1987

Member: California Radioactive Materials Management Forum, Public Education Committee, 1983

Member: County of Los Angeles, Engineering Geology and Soils Review and Appeals Board, 1981-2000

City Geologist: City of Agoura Hills, 1984-1998

Consultant: American Indian Tribes (Council of Energy Resource Tribes), Mineral and Petroleum Resources, 1979-1985

Consultant: California Public Utilities Commission for the proposed LNG facilities Pt. Conception California, 1978-1982

Consultant: County of Ventura, County Engineer, 1978-present

Member: City of Los Angeles, Earthquake Prediction Task Force, 1976-1983

Member: State of California Earthquake Prediction Evaluation Council, 1975-1983

Technical Consultant: Expert Witness, State of California, CalTrans, 1993-present

James E. Slosson [7]

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Member: City of Los Angeles, Hazardous Buildings Code Development Committee, Building and Safety Committee (URM/Seismic Safety), 1971-1973, 1976-1980

Member: State of California Board of Registration for Geologists and Geophysicists, 1978-1985 (President 1978-1982)

Commissioner: State of California Seismic Safety Commission, 1975-1978, 1991-1999

Member: State of California Citizens Committee on U.S. Forest Service Management Practice for Roadless Areas, 1978-1979

Member: American Society of Civil Engineers, Geotechnical Engineering Division, Rock Mechanics Committee, 1976-1980

Member: Engineering Geology Advisory Committee, City of Los Angeles, Department of Building and Safety, 1975-1990

Member: Advisory Committee for Socio-economic and Political Consequences of Earthquake Prediction, University of Colorado, National Science Foundation Study, 1975-1976

Member: Oversight Committee on the Technology Assessment of Earthquake Prediction, Stanford Research Committee (FEMA), 1975-1976

Geologic Consultant: State of California, Department of Transportation, 1993-present

Geologic Consultant: County of Los Angeles, County Counsel, 1970, 1976-1996

Geologic Consultant: State of California, Public Utilities Commission, 1976-1982

Geologic Consultant: City of Thousand Oaks, Department of Public Works and Building and Safety, 1972-1973

Geologic Consultant: Division of Forestry, State of California, 1975

Member: Governor's Earthquake Council, State of California, 1973-1974

Executive Secretary: Geothermal Resources Board, State of California, 1973-1975

Member: Hospital Building and Safety Board, State of California, 1973-1975

Comment Letter O059 Continued

3. The impact of disposal of removed material on biological resources

The amount of dirt and rock that would need to be removed during the tunneling process is massive, yet there is no description of where this material would be disposed of and how this will affect terrestrial or aquatic biological resources.

4. Location and frequency of surface boring holes

Presumably, there will be some pre-excavation investigation of subsurface geologic conditions using boring machines from the surface, but there is no mention of how these operate, what ground-level disturbance is required, and how these machines will get into and move around the remote and extremely rugged backcountry of the Diablo Range or the Tehachapi Mountains. The following excerpts from the DEIR/S say that these areas may pose excavation difficulties, but no detailed information is presented on what alternative construction techniques might be used and how these difficulties might affect biological resources. The Draft states,

Construction of mountain crossings for both the Modal and HST Alternatives would be constrained by existing unstable slopes and areas of difficult excavation. The tunnels proposed under the HST Alternative would pose additional design and construction issues because of difficult excavation conditions." (DEIR/S at 3.13-8) (emphasis added)

and,

Subsurface geologic conditions will largely determine the ease or difficulty of excavation, which will in turn indicate the appropriate excavation technique for use in various areas. For instance, hard unfractured bedrock may be difficult to excavate using bulldozers and other earthmoving equipment, or too resistant to tunneling using a tunnel boring machine; in these areas, blasting may be required. On the other hand, fractured rock that contains groundwater can also be difficult to excavate using tunneling methods. Faulted material can pose an additional challenge by contributing to instability at the tunnel face. (DEIR/S at 3.13-5)

It is critical that the DEIR/S describe the technical assumptions behind the construction of tunneling, as they relate to the overall feasibility and cost of the project and the potential biological impact of system construction and operation.

B. Lack of Description and Analysis of Construction Activities for Aerial Structures

Like tunneling, use of aerial structures is often cited in the DEIR/S as a way to avoid biological impacts, particularly to aquatic systems, but there is no description or analysis of the impacts stemming from the construction and use of these structures. There are no criteria presented in the DEIR/S for which surface water bodies would be spanned with aerial structures and which would be filled, diverted or run through culverts.

The DEIR/S presumes that bridges will be used to avoid impacts to aquatic resources: "it is expected that streams and rivers would largely be spanned by bridges (culverts also can be used) to minimize potential impacts on the flow and water quality of these hydrologic resources", but meaningful analysis is deferred until later. "potential impacts on water quality from surface runoff or erosion during project construction would be identified during the project-specific analysis and the design phase, and standard BMPs would be used to minimize potential impacts." (DEIR/S at 3.14-9) (emphasis added) This deferral of analysis is unacceptable for a project of this magnitude, and the DEIR/S should be revised to document what construction techniques will be used to avoid degradation of these resources, and what specific mitigation strategies would be used in cases where impacts cannot be avoided.

Our analysis using the GIS data of proposed alignments provided by the CHSRA shows that many intermittent and perennial streams and rivers are crossed by alignments with the "At-grade" construction designation and not "Aerial" or "Aerial-g", suggesting that either the data used for the DEIR/S are not accurate or that significant disturbance to water bodies and riparian vegetation and wildlife communities would be unavoidable from HST construction and operation.

C. Inadequate Description and Analysis of Construction Activities to Upgrade Existing Rail for HST

It is assumed throughout the document that impacts along parts of the HST system that use existing rail lines will have minimal impacts because a broader footprint is not required for HST operation. While plausible, there needs to be some description of how rail lines will be upgraded to give the public and decision-makers an understanding of the level of disturbance, habitat alteration and use of water resources. These details figure into the overall cumulative impact on biological resources and cannot be omitted from a Program-level DEIR/S.

D. Inadequate Description of Maintenance Infrastructure and Activities

The Draft contains no information about what maintenance infrastructure or activities will be conducted as part of the HST system maintenance. For example, there is no information about what roads would need to be built and maintained to access parts of the line, what level of vegetation management would be necessary to keep rights-of-way clear in natural areas, or whether any herbicides would be used to manage vegetation.

III. Inadequate Analysis of Direct, Indirect and Cumulative Impacts of HST System

A. Deferment of Detailed Analysis to Project-Level

While a program-level EIR/S is essential to tiering environmental review for a large project such as this, an adequate amount of information and analysis is essential to choose among alternatives or to choose station and alignment options within the HST alternative. Unfortunately, the DEIR/S has not met this standard at either level. It is imperative that an agency preparing an EIR/S use appropriate, accurate and current data, choose the right type of analysis for the resource in question and consider the full range of direct, indirect and cumulative effects of the proposed action. Admittedly, this is a substantial undertaking for a project like this, as there are many unknowns and the geographic extent of the project covers very diverse ecological systems. Even so, CEQA guidelines mandate that an agency "must use its best efforts to find out and disclose all that it reasonably can." CEQA Guidelines § 15144

The fundamental problem with much of the impact analysis for biological resources is that it aims for a minimal analysis by using easily accessible statewide GIS layers to answer the question, *what sensitive and special status species and habitats are within a mile (at most) of the proposed HST alignments?* While this is a critical basic question to answer in an EIR/S, it is also essential to attempt to answer the question, *how will construction and operation of the high-speed train impact ecosystem functioning, special-status species viability, and persistence of sensitive vegetation types?* This requires an additional level of effort in data collection, review of published scientific literature and incorporation of ecological principles in the preparation of the DEIR/S: decision-makers and the public cannot understand the scope of impacts if the document does not meet this higher standard for disclosure and analysis.

It seems that CSHRA and FRA felt justified in deferring analyses because this is a Program-level EIR/S; and that once modal and alignment decisions are made after this review, site-specific analyses will characterize the full environmental impact. For example, the Draft states,

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O059-4



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Identification of potential impacts on various biological resources for this Program EIR/EIS has primarily relied on the available GIS database, other GIS tools, and review of available literature. These sources encompass a broad range of information that may not exactly correspond to actual field conditions. Project-level studies would be required to obtain more reliable assessments of potential impacts on biological resources in the study area.

The subsequent biological resources analyses required for project environmental documentation would focus on project-specific impacts that reflect more precise definitions of the right-of-way, the proposed facility locations, and the operations. (DEIR/S at 3.15-31)

The problem with this logic is that cumulative impacts cannot, by definition, be analyzed at a project or site-specific scale; they need to be analyzed at a system-wide scale. In another instance, the DEIR/S says that a program-level EIR/S does not need to be a complete analysis of impacts, just a representative one.

The biological resources and wetlands described above in the affected environment section (Section 3.15.2) characterize the existing conditions in the five regions potentially affected by the alternatives, drawing primarily from existing available data, with gaps in data in some areas. Because this is a program-level analysis, data are representative rather than complete, and are for comparison purposes. (DEIR/S at 3.15-17)

Elsewhere, in the Bakersfield – L.A. Biological Resources Technical Evaluation, the discussion of deferred analysis is more striking. "Temporary and permanent impacts to biological resources and jurisdictional waters and wetlands will be determined on a project-level basis with the use of project specific biological survey and mapping data and final as-built project plans."(p. 63) Unfortunately, the selection of either modal or alignment alternatives is not justified without an adequate level of detail or analysis.

B. Use of Best Available Data

TNC believes that in order to adequately determine the impact of the proposed actions, the DEIR/S is required under CEQA and NEPA to use the most current and appropriate data available. The reliance on data sets such as the California Natural Diversity Database (CNDDDB) to determine the true extent of direct and cumulative impacts is insufficient for many wildlife and plant species. This is especially true in areas that are typically undersampled in the database due to remoteness or lack of publicly accessible land. The CNDDDB, and any database of observational data, is going to be seriously limited for analyzing impacts on less widely distributed species, as it documents only occupied habitat, not potential habitat. In addition, CNDDDB only maps occupied habitat where somebody has surveyed and sent the survey results into the program. This is likely a small percentage of the full distribution of many species. For many listed species, there are other key sources of data that were only partially used in the DEIR/S including Natural Community Conservation Plan (NCCP), Habitat Conservation Plan (HCP), Multiple Species Conservation Plan (MSHCP) reserve designations, designated critical habitat, recovery plans, and habitat suitability models like the GAP analysis project predicted distribution layers generated from the California Wildlife Habitat Relationship (WHR) models.

Use of suitable wildlife habitat models (e.g. WHR) and data created to represent other high quality habitat (e.g. via critical habitat designation or NCCPs) to analyze the effect of the proposed action on sensitive wildlife habitat and movement linkages would facilitate more meaningful interpretation of direct and cumulative impacts. For example, the DEIR/S needs to quantify the percent of suitable habitat that is lost, fragmented and degraded as a result of the construction and maintenance across the full distributional range of the species, factoring in the other threats to species viability. This is the minimum necessary to characterize the cumulative impact on rare or sensitive wildlife. The DEIR/S needs to consider not just

the amount of lost habitat within the narrow study area, but the change in spatial configuration of habitat and the loss of effective habitat as a result of factors such as noise, light and associated maintenance infrastructure. Without such an analysis, decision makers cannot make a determination of which alternatives are the least environmentally damaging.

C. Inadequate Analysis of Wildlife Habitat Fragmentation

Based on the information presented, one of the most significant long-term ecological impacts of the HST project will be the fragmentation of wildlife habitat and isolation of species. Over time, the negative effect on population viability from fragmentation of habitat could be extreme for some wide-ranging or migratory species, such as pronghorn, mountain lion, and San Joaquin kit fox. At a finer scale, the fenced rail corridor may block access to critical habitats necessary during a portion of a species life cycle. (e.g. wetlands for amphibians). The isolating effect will be greatest in areas where the rail corridor bisects large, relatively intact landscapes, like the Diablo Range in the Bay Area and the southern Sierra Nevada along State Route 58. Given how little intact low-elevation habitat remains in California for wide-ranging species, it is scientifically unjustifiable to consider further fragmentation when other alternatives exist for alignments in and around existing developed areas.

The DEIR/S cites the Missing Linkages data as the source for wildlife habitat linkages that was used to characterize what species would be negatively affected by the proposed alignments, yet it only used the data set for the L.A.- Bakersfield technical report. It is essential that an assessment of wildlife habitat fragmentation along the whole HST system be conducted using this statewide data set. Even this, however, would be appropriate only as an initial assessment, because the Missing Linkages data is, in many cases, only a best guess as to where wildlife are moving between suitable core habitat areas. Further habitat connectivity modeling and field studies are necessary before the impact of a fenced rail corridor can be adequately assessed. As mentioned earlier, analysis of suitable habitat that would be fragmented by the rail corridor and incorporation of population locations and recovery plan demographic data is the only meaningful way to assess the impact of fragmentation.

The DEIR/S makes some statements about wildlife movement that are contradictory for the same species, bringing into question the level of expertise for much of the interpretation. For example, when discussing the movement patterns of the San Joaquin kit fox, the DEIR/S states, "The kit fox has a wide distribution, using the spine of the Diablo Range as a north-south movement corridor." (DEIR/S at 3.15-21) and in the Bay Area – Merced Technical evaluation. "On the west side of the Great Valley the relatively extensive strip of annual (non-native) grassland, which lies between the irrigated fields and orchards of the valley floor and the oak and pine woodlands of the Diablo Range, constitutes a major movement corridor for San Joaquin kit fox." (p. 56) Given the strong habitat preference of kit fox in flat or low relief areas, TNC believes that it is unlikely that San Joaquin kit fox are moving along the spine of the Diablo Range.

The issue of fencing is an extremely important aspect of HST design that was largely absent from the discussion of wildlife impacts. The only details of the fence design and extent that we could find was in the Capital Costs Appendix (4-c, page 10).

This is a security chain link fence 2.5m (8.2 ft) in height along the right-of-way. All at-grade sections, trench sections, cut and fill sections, tunnel portals, maintenance areas, and any other areas where tracks are accessible to public would be fully fenced. A unit cost for fencing was applied per length of alignment and includes fencing for both side of right-of- way.

There is no analysis of how much of the route will be fenced, which species will likely be affected, or whether overpass pilings and support beams will also be fenced. It is unclear from the DEIR/S if wildlife behavior was factored into the fencing design because many species, including mountain lion, can easily

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O059-6



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jump higher than 8 feet. Given that this is an extremely significant impact on wildlife movement, more information about fencing design and potential mitigation strategies should be included in a revised DEIR/S.

**D. DEIR/S Does Not Consider Basic Ecosystem Functioning**

The DEIR/S primarily uses coarse, statewide GIS layers (such as GAP vegetation data) to quantify the resources affected within the .5 – 1 mile swath along the proposed rights-of-way and from that characterizes the degree of impact. This approach is limited in its ability to fully assess the degree of alteration that would result from HST construction and operation, because it ignores the underlying ecological processes that create the (somewhat dynamic) patterns of biodiversity expressed in GIS data. Processes such as nutrient flow, natural disturbance, pollination, predation, genetic interchange, surface and groundwater flow all interact to sustain communities of species over time.

While little spatial data exists to characterize the dynamics of these processes, published studies and experts should be used to assess the impact of a significant fragmenting feature such as a rail corridor. The spatial scale at which ecological processes operate is widely variable and any interpretation of the impact of HST on biological resources needs to factor in the effective "area of influence" for the resources in question. For example, a wetland can be filled and impacted directly by HST if it overlaps with the rail line, but a wetland can also be affected miles away from the rail line if upstream changes in surface and groundwater flow result from HST construction and operation.

Key issues that need to be addressed in a revised DEIR/S include:

1. How the presence of the HST system will affect the movement and management of fire in fire-adapted ecosystems and on public land
2. An analysis of the wetland – groundwater relationships that would be affected by HST
3. What vegetation communities will be affected by changes in microclimate, soil moisture, and seed and nutrient sources resulting from altered hydrologic and wind regimes, soil compaction and loss of canopy vegetation in forests and riparian areas in the right-of-way
4. What chemicals will be used during construction, operation and maintenance and how these may affect biological resources through soil and water pollution
5. Detailed analysis of the effects on riparian vegetation and associated fauna from presence of rail corridor near streams and rivers
6. An analysis of the effect of changes in sediment deposition and water temperature on salmon and steelhead populations

**E. Significant resource impacts not addressed in DEIR/S**

*Invasive species*

One of the primary global threats to biodiversity is the spread of non-native, invasive species into ecosystems. Given the seriousness of this threat, it is unacceptable that there is no discussion of the potential spread of invasive species posed by HST construction and operation, particularly in remote areas without any major human infrastructure (e.g. Diablo Range). Extensive research in road right-of-ways shows that opportunistic invasive species often outcompete native plants, following soil and canopy disturbance. These disturbances increase rates of establishment due to changes in light and moisture availability. Railroads, like roads, are an extremely efficient distribution mechanism for invasive species, and seeds may be transported on construction and maintenance equipment, and possibly trains

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themselves. A revised DEIR/S must factor in the current distribution of invasive species along the route and consideration of the ecological effect the spread of these species in terrestrial and aquatic ecosystems would have on native biodiversity.

*Noise, vibration and light effects on wildlife*

The increased noise resulting from the HST system was not analyzed for its effect on wildlife. In numerous studies along roads, birds and mammals show reduced breeding success, changes in movement patterns and altered behavior along roadways. The primary factors related to noise impacts are the amount of traffic and the presence of mitigating factors such as barrier walls. Oddly, the noise impacts on animals are casually referenced in the DEIR/S, but there is no analysis of which species or areas would be most affected in section 3.4 (Noise and Vibration).

At 3.15-4 the Draft states, "To account for potential indirect impacts on biological resources that could result from project-related noise, light, or shadows, as well as other disruption to or physical separation of habitat areas, the biological resources study area is larger than the footprint of either the Modal or HST Alternative..." Again at 3.17-9, "The potential for indirect noise effects on biological resources is addressed in Section 3.4, Noise and Vibration." Yet, in section 3.4, noise impacts on wildlife are mentioned fewer than five times with regard to HST, and never with any specifics. The DEIR/S needs to address noise impacts in a revised document.

Similarly, increases in light at night and vibration reduce habitat quality for many species including waterfowl, amphibians, and nocturnal mammals. These issues need to be analyzed in a revised DEIR/S at the scale of the whole system, not at the project scale.

**F. Cumulative impacts and growth inducement analyses are inadequate**

TNC believes that both NEPA and CEQA mandate that cumulative impacts be assessed within an EIR/S. As mentioned above, the analysis of cumulative impacts needs to be thoroughly conducted at this stage in the environmental review, not at the project level. The section of the DEIR/S dealing with cumulative impacts (3.17) defers any meaningful, quantitative analyses to project-level review, but does say that cumulative impacts are likely:

During project-level environmental review, field studies would be conducted to verify the location, in relation to the HST alignments, of sensitive habitat, wildlife movement corridors, and wetlands. These studies would provide further opportunities to minimize and avoid potential impacts on biological resources through changes to the alignment plan and profile in sensitive areas. For example, the inclusion of design features such as elevated track structures over drainages and wetland areas and wildlife movement corridors would minimize potential impacts to wildlife and sensitive species. However, when combined with the potential impacts of other highway, water, and conventional rail projects in the five regions, the HST Alternative would contribute to potential cumulative impacts on biological resources. (DEIR/S at 3.17-9)

To say that cumulative effects are likely without any attempt to determine which biological resources are most at risk and what mitigation strategies will be used to avoid cumulative impacts does not, in TNC's opinion, comply with NEPA or CEQA. Generalizations about impacts cannot take the place of quantitative analysis. An example of such a vague statement is: "The HST Alternative would generally be located within or adjacent to existing transportation corridors or would be in tunnel or elevated through mountain passes and sensitive habitat areas". (DEIR/S at 3.17-9)

Based on a GIS analysis by TNC, we believe that this above statement is misleading. Data acquired from the CHSRA show that there are at least 250 miles of proposed route, along all of the potential HST alignments, that are more than a half mile from an existing highway (i.e. not near existing transportation

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Comment Letter 0059 Continued

corridor) and are designated a "new alignment" and "at-grade" (i.e. not in tunnels or elevated.) Much of these proposed alignments go through the Diablo Range and TNC's Mount Hamilton project area, one of the last large, intact low elevation landscapes with a large proportion of private land in California.

An analysis of the potential indirect and cumulative effects from growth inducement resulting from HST construction needs is missing in the DEIR/S. The increased commuting mobility that HST will enable will likely catalyze significant growth and expansion of the developed footprint for many cities and towns, particularly in the Central Valley. The station location in Los Banos is the most striking example of this potential, given that the area is near the Grasslands Ecological Area and the proposed station is almost 10 miles from the town of Los Banos. Another example of how HST will catalyze growth is in Palmdale, where support for the alignment that runs through their city has been the subject of recent popular media stories.<sup>6</sup> The DEIR/S needs to analyze the potential impact on projected growth in these areas on listed species habitat, wildlife movement and water resources.

A revised cumulative impacts analysis must quantify all direct, indirect, and cumulative impacts to natural resources, factoring in the full range of other threats posed to species and community viability by other transportation projects across the range of the species at the scale of the whole HST system.

G. Inconsistent regional technical evaluations

TNC believes that CEQA and NEPA mandate that information for each alternative be analyzed consistently at the same level of detail with information presented in a consistent format. The Biological Resource Regional Technical Evaluations not only present information in very different formats, but also present different information. Oddly, some datasets that are statewide in extent (e.g. Missing Linkages) were used only for some regional studies. This prevents the DEIR/S reader from being able to fully understand the full range of impacts and to make an informed decision about what alternative is in the best interests of California's people and ecosystems. A few examples of these inconsistencies include:

- The Bay Area-Merced technical evaluation does not even address wildlife linkages, while Bakersfield-L.A. does quite a bit.

- The maps in the Los Angeles-San Diego and Bakersfield-L.A. technical evaluations are much more detailed than the other regions.

- The Bay Area-Merced evaluation did not address stations or tunnel portal impact at all. "We did not analyze 0.25 mile buffers around stations and alignments in undeveloped areas (or 0.50 acres in the vicinity of estuaries and lagoons) since engineering data were not available for stations or tunnels at the time of writing of this document." (BA - Merced BRTE, p. 59)

A consistent set of data and a template for the formatting and presentation of information on impacts should be standardized in a revised DEIR/S. It is critical that the same map data and scale be used on a consistent set of maps for the whole HST system.

Related to the issue of consistent regional analyses is the need for an assessment of an Altamont Pass mountain crossing. For many reasons, both economic and biological, we feel that an Altamont HST alternative needs to be analyzed at the same level as the other northern mountain crossings. Without a consideration of this alternative, the DEIR/S clearly does not include a full range of reasonable alternatives.

<sup>6</sup> "Palmdale on Board with High Speed Rail Plan" Los Angeles Times, August 9, 2004

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IV. Inadequate Discussion of Mitigation Alternatives

Like other sections, the Draft section on mitigation contains no details about the steps that would be taken in specific areas and which affected resources would be targeted. There is no assessment of the cost, feasibility and likelihood of success for the general actions proposed. For some species and resources that will be severely or broadly affected, mitigation needs to be assessed at the level of the whole HST system, not at a project-level. Vague statements about mitigation suggest a piecemeal approach to mitigation that will focus on design and alignment tweaks for specific segments, rather than system-wide analysis. An example of this is quoted below:

For example, to avoid or minimize impacts in sensitive areas, alignment plans and profiles could be adjusted or proposed structures could be constructed above grade or in tunnels...Special mitigation needs would be considered in the future with the appropriate authorities that are responsible... (DEIR/S at 3.15-31)

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 biological resources may potentially be avoided by as yet undetermined mitigation. Mitigation options, such as overpasses and tunneling, may prove to be infeasible.

The DEIR/S should also analyze the "net benefit" mitigation options that could opportunistically coincide with the construction of a HST system. In a project this massive in scope, there will undoubtedly be opportunities to improve wildlife habitat connectivity at existing chokepoints, improve aquatic habitat connectivity for migratory fish and restore a functional tidal influence for coastal lagoons and wetlands. These actions should be considered mitigation options that construction of HST would enable and should be identified early in the review process.

The cost of proposed mitigation options should be factored into the overall feasibility of the project, especially considering the fact that many of the proposed routes traverse areas with high resource and land values. TNC could not find any quantified estimates of mitigation for unavoidable impacts in the DEIR/S. While it may be impossible at this stage to quantify the full cost of mitigation along all proposed alignment alternatives, more specifics on the cost, feasibility and likelihood of success are needed, especially for wetland mitigation and construction of wildlife underpasses and overpasses.

IV. Summary

TNC appreciates the opportunity to provide comments on the proposed HST project. We recognize the considerable challenge of meeting the transportation needs of a growing California, while maintaining the natural values that make California exceptional. TNC believes that we need to find creative solutions to these needs, and that the growth of our ecological infrastructure needs to run parallel to our expanding human infrastructure. Given the massive scope of this project and significant commitment of financial resources to carry out the proposed plans, the public and decision-makers need to be presented with a thorough and consistent analysis of the environmental impact of the project to assess the relative cost and benefit of a HST system.

Unfortunately, this standard for analysis has not been met in the DEIR/S as it does not fully factor in the full direct, indirect and cumulative impacts of the project. Many key aspects of the project, including

<sup>7</sup> In a paper entitled, *Use of non-wildlife passages across a high speed railway by terrestrial vertebrates*, researchers in Spain found that many factors influenced the use of culverts and passageways including proximity to habitat, human disturbance and dimensions of the passages. They found that ungulates were not using the passages even though they are found throughout the area and that the railway was a movement barrier for these animals. In Rodriguez et al. (1999) *Use of non-wildlife passages across a high speed railway by terrestrial vertebrates*. *Journal of Applied Ecology* 33, 1527-1540.

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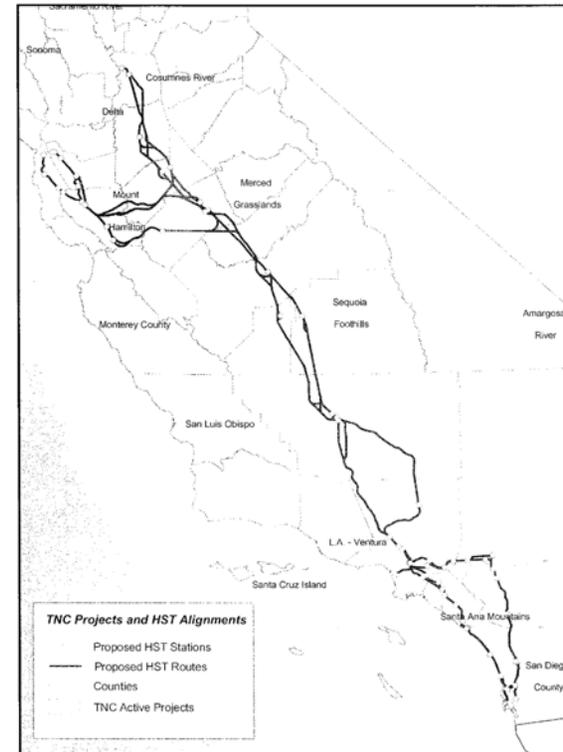
construction impacts, impacts to wildlife habitat connectivity, and impacts to fisheries, riparian areas and aquatic systems, have not been sufficiently analyzed. The deferral of these and other important analyses to a project-level review is not justified given the fact that many species, communities and ecological systems will be impacted across the full extent of the proposed HST system and will likely be subject to indirect and cumulative impacts. Mitigation options for unavoidable impacts have not been thoroughly analyzed for feasibility, likelihood of success, and additional overall cost to the project. Until this higher level of analysis and review is met, TNC believes that a decision regarding the most appropriate modal alternative to meet future transportation needs, let alone a decision on a preferred alignment for HST is not possible.

Thank you for considering and responding to our comments.

Respectfully,

*Graham Chisholm*  
Graham Chisholm  
Executive Director  
The Nature Conservancy of California

Attachment 1: Map of TNC projects in California Relative to HST alignments





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**Response to Comments of Graham Chisholm, Executive Director, The Nature Conservancy, August 31, 2004 (Letter O059)**

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**O059-01**

Based on the issues raised in this comment and others, the Co-lead agencies are proposing to continue and supplement their evaluation of HST alignment options between the Central Valley and the San Francisco Bay Area (see standard response 6.3.1). Further investigation has been recommended to identify a preferred alignment option from within a broad corridor, which excludes alignment options through Henry Coe State Park and the Orestimba State Wilderness. The future study would consider alignment options between (and including) the Pacheco Pass Corridor (SR-152) to the south and the Altamont Pass Corridor (I-580) to the north. As part of this additional analysis, existing alignments (i.e., the Pacheco Pass and Northern Tunnel - North of Henry Coe State Park and the Orestimba State Wilderness) will be refined based on comments received from the public during the comment period on the PEIR/S. A conceptual alignment for Altamont Pass with design variations as appropriate will be developed. Public participation and interagency coordination will play a major role in the definition of alignment and design variations. This future study will discuss impacts that may still remain for these alignments and how cost, logistical, or technological constraints may preclude avoidance of impacts. The study will also evaluate the habitat and wildlife issues raised in this comment for all alignment options considered. Please see standard responses 3.15.2, 3.15.3, 3.15.4, 3.15.9, and 3.15.11, and responses to Comments AS004 – 46, 47, 48, 49, & 51, AS012 – 7, 8, 9, 12, & 17, and O034 – 3 & 4 regarding impacts to wildlife and wildlife corridors and habitat fragmentation.

**O059-02**

The following HST alignment options through areas identified in this comment have been dropped from further consideration: (1) Camp Pendleton, (2) Henry Coe State Park and the Orestimba State Wilderness, (3) Los Padres Forest & Angeles Forest, (4) San Dieguito

Lagoon Ecological Reserve, and (5) San Diego Wildlife Refuge. The HST alignment would be within the I-15 right of way, which is adjacent to the Santa Margarita River Ecological Reserve. Please see standard response 3.15.11 regarding HST alignments near the Santa Clara River. The project-level, Tier 2 studies will fully evaluate the potential impacts of the proposed HST system on the Santa Clara River valley. Please see standard response 3.15.2 and standard response 3.15.13 regarding the general level of detail in the PEIR/S, the subsequent project-level environmental analyses, and the intended uses of this PEIR/S. Project-level environmental analyses will include consideration of the River Enhancement and Management Plan as well as a detailed analysis of endangered animals and plants as recommended in the comment. Please see responses to Comments AL072 regarding the San Luis National Wildlife Refuge Complex (Grassland Ecological Area). As part of the additional analysis of alignment options between the Central Valley and Bay Area, the potential impacts to the Grasslands Ecological Area will be evaluated in more detail. This evaluation will use the information provided in several comments (including this one) to help define the scope and methodology, and to supplement data used in the analysis.

**O059-03**

Section 2.6 of the Final Program EIR/EIS describes the HST Alternative, the No Project Alternative, and the Modal Alternative. Chapter 3 describes potential environmental impacts associated with the HST, No Project, and Modal alternatives. Section 3.18 of the Final Program EIR/EIS addresses construction methods and the potential for construction impacts in general. In addition, each section of Chapter 3 also outlines “design practices” and features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. However, construction impacts are highly site-specific in nature. These issues will be addressed in detail during subsequent project level

environmental review, based on more precise information regarding location and design of the facilities proposed (e.g., specific alignment, right-of-way corridor width, elevated, at-grade, cuts and fills, etc.). The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize, and mitigate potential impacts.

**O059-04**

This comment helps frame the issues faced by the Co-lead agencies in deciding how to evaluate the potential environmental impacts of a project as large and extensive as the proposed statewide high speed train system. The Co-lead agencies believe that the impact evaluation procedures used in the analysis were appropriate for the PEIR/S and for the decisions that are being considered. Please see standard response to 3.15.13. In terms of cumulative impacts, the Co-lead agencies have evaluated system-wide effects for this PEIR/S. System-wide impacts would inform project-level, Tier 2 environmental analysis, which would involve collecting and evaluating data at the project level (e.g. detailed field surveys of biological resources) and analyzing this data both on the site-specific and cumulative basis. It should be noted that the general data reported in the PEIR/S for the system alternatives clearly indicates that the Modal Alternative would have more severe system-wide impacts than the HST Alternative, leading to the identification by the Co-lead agencies of the HST Alternative as the preferred alternative and as environmentally superior, given that it would have a lower overall level of adverse impacts. This analysis was based on the program-level data analysis and consistent evaluation methodologies for both alternatives. Unlike the HST system, highway and airport improvements like those in the Modal Alternative are typically implemented by numerous government agencies throughout the state in a loosely coordinated and piecemeal fashion. Project-specific environmental analyses prepared for these common types of highway and airport incremental expansions do not evaluate the overall cumulative impacts of these multiple projects across the state, as the type of analysis contained in the PEIR/S is beyond the scope of their responsibilities and are not required. The Co-lead

agencies are not “ducking” their responsibilities for preparing an environmental analysis that accurately evaluates the proposed high speed train system only to make a decision on whether to proceed with the project or not, but are rather using a structured and deliberate tiered approach to completing NEPA and CEQA analysis as accurately and efficiently as possible. The Co-lead agencies acknowledge that it is highly possible that there will be environmental impacts identified during the project-level, Tier 2 studies that will require refinements to alignments, development of alignment design options, and adoption of myriad mitigation measures; but the Co-lead agencies believe that this process is reasonable, appropriate, practical, and far more efficient than completing detailed environmental analysis of all possible alignment options before deciding to eliminate some alignment options from further evaluation. Please also see standard response 3.17.1.

**O059-05**

Please see standard response 3.15.2 regarding the level of detail for the biological evaluation and standard response 3.15.13 regarding the intended use of the PEIR/S. Please see standard response 3.15.10 regarding use of HCPs, MSCPs, etc. Please see response to Comment O034 – 6 regarding noise and light impacts. The Co-lead agencies believe that the impact evaluation procedures used in the analysis were appropriate for the PEIR/S. The project-level, Tier 2 studies will address the issues raised in this comment, including the use of more detailed habitat information and models.

**O059-06**

Please see standard response 3.15.9 regarding impacts and mitigation to wildlife corridors, habitat fragmentation, and use of fencing. Please see standard response 3.15.5 regarding the portion of the HST alignments within or adjacent to existing transportation rights-of-ways and/or within a tunnel. Please see response to Comments AS012 – 7 and O034 – 19 regarding the Missing Linkages information.

**O059-07**

Please see standard response 3.15.7 and response to Comment O044 – 27 regarding the envelopes used for the biological analyses. Please see standard response 3.15.2 regarding the level of detail for the biological evaluation and standard response 3.15.13 regarding the intended use of the PEIR/S. Project-level, Tier 2 studies will include consideration of the data sources, methodologies, and issues described in this comment. As the comment acknowledges there is little geo-spatial data available to characterize the dynamics of ecosystem functioning and the spatial scale upon which ecological process function is widely variable. The Co-lead agencies also acknowledge the importance of evaluating the issues outlined in the comment in future studies, especially as part of project-level, Tier 2 evaluation, when more information will be available describing specific alignments and design options.

**O059-08**

Please see response to Comment AS004 – 45 regarding invasive species. Please see response to Comment O034 – 6 regarding noise, vibration, and light impacts on wildlife.

**O059-09**

See Standard Response 3.17.1.

**O059-10**

The Co-lead agencies have decided to prepare further investigation of the broad corridor between the Central Valley and Bay Area including additional evaluation of the Altamont Pass alignment as requested in this comment. Please see standard response 3.15.7 regarding anticipated future studies of the Altamont pass. See Section 3.18 of the Final Program EIR/EIS concerning potential construction methods and impacts.

**O059-11**

In the Final Program EIR/EIS, each environmental area (sections of Chapter 3) has been modified to include mitigation strategies that would be applied in general for the HST system. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts. Specific impacts and mitigations will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize, and mitigate potential impacts. Only after the alignment is refined and the facilities are fully defined through project level analysis, and avoidance and minimization efforts have been exhausted, will specific impacts and mitigation measures be addressed.

**O059 Attachment 2**

This list is noted for consideration as part of future environmental reviews, including the program-level studies for the northern mountain crossing (Bay Area to Central Valley) and project-level reviews, when possible impacts (including biodiversity impacts) and on ongoing research can be considered in detail.

Comment Letter O060

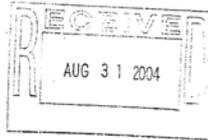
O060



Morshed:

31 August, 2004

Mehdi Morshed, Executive Director  
California High Speed Rail Authority  
c/o 925 L Street, Ste. 142S  
Sacramento, CA 95814



It has come to my attention that the above-referenced has among its proposed alignments, the possibility of the HST going through the parks in The Cornfields, located in northeast Los Angeles adjoining Chinatown and nearby Taylor Yard. One of the affected communities is the Los Angeles neighborhood of Cypress Park, which is where we work.

I would like to register the very strong objections on this issue:

- 1) There has been no apparent effort to inform the affected communities about this proposal. As President of North East Trees that works in partnership with the local community as well as the environmental there has been absolutely no outreach to our community on this matter. In fact, I just found out about this proposal two days ago and comment must be made by today, 31 August.
- 2) The Notice of Availability of the Draft Program EIR/EIS is insufficient. Two of the communities that will be directly affected regarding the proposed alignment(s) through Taylor Yard are Cypress Park and Glassell Park. These communities have a predominantly minority population and a large percentage of low-income residents. These residents are not notified during this environmental process and are being slighted.
- 3) Because of this late notification, there is an apparent inability of the affected communities to review the Environmental Documents and Technical Appendices as well as the Administrative Record, which I am sure are extensive. Our communities have not had the opportunity to review these crucial items nor have the communities had a chance to provide input of any kind.
- 4) The Cornfield and Taylor Yard need significant analysis per Section 4(F) of the DOT Act of 1966 and it is essential that alternative suggestions and alignments are proposed to the alignment(s) that include the Cornfield and/or Taylor Yard. Unfortunately, because we have not seen the Environmental Document, the Technical Appendices nor the Administrative Record, we have no idea if this has been addressed.

I would like to recommend that the following steps be taken on the above issues before anything pertaining to the HST proceed: There needs to be at least a sixty (60) day period for our communities to have the opportunity to properly review the Environmental Document and Technical Appendices along with the Administrative Record.

This should include well publicized public hearings throughout the Los Angeles area in the communities along each of the proposed alignments. This issue must be brought before the Neighborhood Councils in the City of Los Angeles, especially those that are affected by the HST so that significant stakeholder input can be heard on this crucial matter.

I thank you in advance for your time and consideration. I look forward to hearing from you.

Sincerely,

*Scott Wilson*  
Scott Wilson, President  
North East Trees

O060-1 cont.

O060-1

570 W. Avenue 26, Suite 200, Los Angeles, California 90065 Phone: (323) 441-8634 Fax: (323) 441-8618

North East Trees is a non-profit organization improving communities in Northeast Los Angeles by planting an urban forest.



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**Response to Comments of Scott Wilson, President, North East Trees, August 31, 2004 (Letter O060)**

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**O060-01**

Public outreach efforts, consistent with federal and state law were made for this programmatic document. A description of the outreach efforts including a listing of the public meetings held as part of this programmatic document process can be found in Chapters 8 (Public and Agency Involvement) and 9 (Organization, Agency and Business Outreach). The noticing of the availability of the draft programmatic EIR/EIS was consistent with state and federal law. Please reference Chapters 8 and 9 for a description of the noticing of the document. Please see standard response 8.1.1 and standard response 8.1.16.

The Cornfield and Taylor Yard Properties are included and addressed in the Final Program EIR/EIS and would be subject to a full 4(f) analysis for the project level environmental document. The greater focus of the subsequent project level analysis will allow for further avoidance and minimization efforts, as well as identification of specific mitigation, if impacts cannot be avoided. The Authority has identified the MTA/Metrolink, which avoids Cornfield property, as the preferred option. Between Burbank and Los Angeles Union Station, the MTA/Metrolink refers to a relatively wide corridor within which alignment variations will be studied at the project level. This option was selected, in part, because it would have fewer potential affects on both the Cornfield Property and the Taylor Yards. Please see standard response 6.24.2.

Comment Letter O061



DEVELOPMENT AUTHORITY

The Orangeline Development Authority is a joint exercise of powers agency formed to pursue deployment of the Orangeline maglev system in Southern California. The Authority is composed of the following public agencies:

- City of Artesia
- City of Bell
- City of Bellflower
- City of Cerritos
- City of Cudahy
- City of Downey
- City of Huntington Park
- City of Los Alamitos
- City of Maywood
- City of Palmdale
- City of Paramount
- City of South Gate
- City of Vernon

**Chairman**

Hector De La Torre  
 Councilmember,  
 City of South Gate

**Secretary**

Art Gallucci  
 City Manager, City of Cerritos

**Legal Counsel**

Michael Coarullo  
 Columbo & Levin, PC

**Treasurer/Auditor**

Jack Joseph  
 Gateway Cities COG

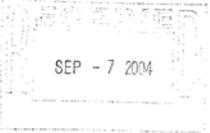
**Executive Director**

Albert Peron, PE

**Supporting Agencies**

- Gateway Cities Council of Governments
- Southern California Association of Governments
- City of Garden Grove
- City of Huntington Beach
- City of Long Beach
- City of Stanton

August 30, 2004



Mr. Joseph E. Petrillo, Chairman and Members  
 California High Speed Rail Authority  
 925 L Street, Suite 1425  
 Sacramento, CA 95814  
 Via Fax Number: (916) 322-0827

Subject: **Comments on California High-Speed Train PEIS/EIR**

The Orangeline Development Authority congratulates the California High Speed Rail Authority for completion of the draft Program Environmental Impact Statement/Environmental Impact Report for the proposed California high-speed train system.

Development of a high-speed train system serving the major population centers of California offers many potential benefits. The economic stimulus resulting from the construction of the system could be an early benefit to the State. The improved access to communities served by the system could be of benefit to the residents of those communities and stimulate economic activity within those communities. The high-speed train system could help to alleviate growing congestion on the State's most heavily traveled highways, airways and airports, and it could provide an alternative to highway and air travel.

The California High Speed Rail Authority's Draft PEIR/EIS reveals many of the key opportunities and issues pertaining to the development of the high-speed train system. The Orangeline Development Authority offers the following input for your consideration. The attached further details our comments on the Draft PEIS/EIR.

1. The plan for staging construction should maximizing benefits and equity – creating early benefits for all Californians | 0061-1
2. The Authority should reconsider the decision to eliminate maglev technology from further consideration | 0061-2
3. Planning of the statewide system should be coordinated with the deployment of the intra-regional maglev system in Southern California | 0061-3
4. The Authority must ensure that the state-wide system serves the needs of local communities and includes a local role in decision-making | 0061-4

The Orangeline Development Authority is composed of Southern California cities that have joined together to pursue deployment of a high-speed maglev system serving its member cities. The Orangeline would extend from north Los Angeles County to south Orange County. It is included in the SCAG Regional Transportation Plan and is identified in federal transportation reauthorization legislation as a national High Priority Project.

We look forward to working with you to coordinate the planning of our two projects to the benefit of all Californians.

Sincerely,  
  
 Hector De La Torre, Chairman

Attachment

<http://orangeline.ca/maglev.org>  
 16401 Paramount Boulevard  
 Paramount, California, 90723 USA  
 albertperon@caimaglev.org  
 310.871.1113 Phone  
 562.924.2152 FAX



Attachment

Comments on  
**California High Speed Rail Authority  
 Program Environmental Impact Statement/Environmental Impact Report  
 for the proposed  
 California High-Speed Train System**

**1) Maximizing Benefits and Equity – Create early benefits for all Californians**

The proposed \$33-37 billion high-speed train system is to be built in stages and would be funded largely through public tax dollars. The proposed sources of funds for the planned initial segment from the San Francisco Bay area to downtown Los Angeles includes a \$10 billion General Obligation bond, a \$5 billion federal grant, federal loan guarantees, airport user fees and passenger facility charges, local funds and existing state gas tax and local sales tax revenues. Thus, the cost of the rail system will be borne by all Californians throughout the State.

The Authority's plan for deploying the system in stages should be balanced to include construction of initial segments in both Northern and Southern California. This approach would create early benefits for both regions of California and ensures a commitment by both regions to connect the northern and southern segments. Building the first segments simultaneously to connect the Bay area with the Central Valley and to connect the Los Angeles region from Palmdale to San Diego would also maximize ridership and revenues. Project revenues from the northern and southern segments could be used to fund construction of the Central Valley connecting segment, much the same way the transcontinental railroad was built and its two segments were joined. This approach would induce higher environmental benefits and reduce the burden on California's taxpayers, thus freeing public dollars for other transportation improvements.

**2) Maglev Technology – Reconsider the decision to eliminate maglev technology**

The Authority should reconsider its decision to eliminate use of maglev technology before finalizing the PEIR/EIS and before making final design and implementation decisions. The PEIR/EIS could be found inadequate and be subject to legal challenge for dismissing maglev as a viable technology. The Authority could risk a lengthy and costly delay in the event of a serious legal challenge. While conventional steel-wheel-on-steel-rail was selected as the preferred technology early in the Authority's feasibility studies, advances in the commercial deployment of maglev technology demonstrate that it is a viable, and perhaps preferable, alternative to steel-wheel-on-steel-rail. Since the federal government is advocating the deployment of maglev technology in the United States, the early dismissal of maglev technology as an alternative does not support the goals of the federal maglev program.

In selecting steel-wheel technology, the high-speed train system may create a higher level of adverse impacts on the environment than may be necessary, particularly in noise sensitive areas, due to the higher level of noise emissions associated with steel wheel versus maglev technology. Within the dense urban areas of Southern California and the Bay area, these impacts could be significantly more severe than in less populated areas, such as in the Central Valley. Other potential benefits of

0061-1  
 cont

0061-2  
 cont



U.S. Department  
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**Comment Letter O061 Continued**

maglev technology, such as lower operating costs, higher maximum and average operating speeds and ability to attract higher ridership and net operating revenues, should be seriously considered and disclosed in the PEIR/EIS. The reasons for discounting these benefits and dismissing maglev technology in favor of steel-wheel-on-steel rail technology should be fully disclosed in order to minimize the risk of delays in securing environmental clearances.

O061-2  
cont.

**3) Alignments – Coordinate planning of the statewide system with the deployment of the intra-regional maglev system in Southern California**  
The Authority proposes to use the same or similar alignments for many parts of the state high-speed train system that are proposed for the Southern California intra-regional high-speed maglev system. These same corridors are also being viewed for an expanded freight system. The PEIR/EIS should address the potential impact of the state high-speed train system on the other proposed projects. These impacts could include higher costs for either or both the state system and the regional systems. If conflicts are not readily resolved, construction of the state system could preclude development of the other projects. Ridership projections for the statewide system should be updated in the final PEIR/EIS to reflect the impacts of the intra-regional maglev system in Southern California, as that system is shown in the adopted Regional Transportation Plan – including ridership and operating revenue impacts of the maglev system on the state high-speed train system.

O061-3  
cont.

**4) Decision-making – Ensure that the state-wide system serves the needs of local communities and includes a local role in decision-making**  
The success of the state high-speed train system will rely on the cooperation of local government agencies, particularly cities with high-speed train stations and through which the trains will pass. Access to the train stations, development around the stations, ridership and revenues are highly dependent upon cooperation from local cities. The Authority must create a formalized role for local government in the decision-making process for planning, building and operating the high-speed train system. Local cities and authorities should be given specified decision-making roles to ensure that the high-speed train system serves the needs of both inter-city travelers and the communities through which they travel. The issues of station locations, alignment, technology, construction staging, etc., would be addressed with local governments having a "seat at the table" with guarantees that local concerns will be adequately addressed. Determinations regarding system alignments and station locations are examples of the issues that should be decided jointly by the Authority and affected local agencies.

O061-4  
cont.



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**Response to Comments of Hector De La Torre, Chairman, Orangeline Development Authority, August 31, 2004  
(Letter O061)**

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**O061-01**

Acknowledged. A plan for staging construction would be prepared after a decision is made to advance the HST system and would be addressed in future project-specific studies. See standard response 10.1.7. Preparation of a financing plan for the proposed HST system is beyond the scope of this program EIR/EIS.

**O061-02**

Please see standard response 2.10.3.

**O061-03**

Acknowledged. See Response AL065-1.

**O061-04**

Acknowledged. The Authority has identified preferred HST alignment and station locations that best meet the purpose and need statement and the objectives for the system, including serving the needs of local communities. The Program EIR/EIS process is a "public" process in which the Authority and the FRA has sought input from local agencies. Please see Chapter 8 "Public and Agency Involvement". The Authority looks forward to continuing to work with local agencies from Los Angeles and Orange County should the HST proposal move forward.



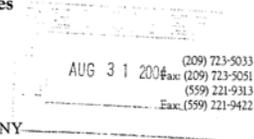
**Comment Letter O062**

**O062**

**OSORIO FINANCIAL**  
**InterValley Insurance Services**

**RICK OSORIO**  
Lic. No. OC47316  
DRE Lic. No. 01295751

1640 N Street, Suite 220  
Merced, CA 95340  
4221 N. Fresno Street  
Fresno, CA 93726



HIGH SPEED RAIL COMMITTEE TESTIMONY

HIGH-SPEED RAIL COMMITTEE MEMBERS

I AM HERE TODAY AS A REPRESENTATIVE OF THE MERCED CITY COUNCIL WHO URGES YOU TO CHOOSE THE DIABLO CANYON ROUTE AS THE PREFERRED ROUTE FOR HIGH SPEED RAIL AND THROUGH THE ATWATER MERCED CORRIDOR WHICH HAS THE LEAST ENVIRONMENTAL CHALLENGES TO THE PROJECT.

0062-1

FURTHERMORE IT IS MY BELIEF THAT THE FORMER BASE IS IDEALLY LOCATED AND AVAILABLE FOR THE HUB THAT WILL BE NEEDED FOR MAINTENANCE AND REPAIR OF THE HIGH-SPEED TRAINS.

0062-2

AFTER CAREFULLY REVIEWING THE E R, I FEEL CONFIDENT THAT THE DIABLO CANYON ROUTE IS VIABLE, PRACTIBLE AND OBVIOUS TO MANY THE MOST DOABLE ROUTE, NOT TO MENTION ENVIRONMENTALLY AND ECONOMICALLY SOUND.

0062-3

WE NEED TO MOVE FORWARD ON THIS PROJECT FOR EVERYDAY THAT WE DELAY THE COST OR MOVING FORWARD INCREASES. FURTHER LET ME SAY THERE WILL BE A HIGHSPEED RAIL SYSTEM IN CALIFORNIA THE QUESTION IS WILL WE BE ON THE THAT TRAIN OR WILL OUR CHILDRENS CHILDREN BE ON THAT TRAIN. THE COST OF DELAY NOT ONLY INHIBITS EMPLOYMENT OPPORTUNITES, ALTERNATIVE TRANSPORTATION OPPORTUNITIES BUT ENVIRONMENTAL OPPORTUNIES TO IMPROVE THE AIR QUALITY OF OUR VALLEY.

ONCE AGAIN I EMPHASIZE THE SELECTION OF THE DIABLO CANYON ROUTE AS THE MOST VIABLE AND PRACTICLE AND NATUALLY THE ATWATER- MERCED CORRIDOR AS THE NUMBER ONE CHOICE FOR THE TRANSPORTATION HUB AND MAINTENANCE FACILITY.

SUBMITTED,

RICK OSORIO  
MERCED CITY COUNCIL

(209) 777-7745 • E-Mail: OSOFIN@MercedNet.com



CALIFORNIA HIGH SPEED RAIL AUTHORITY



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

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**Response to Comments of Rick Osorio, Merced City Council, Osorio Financial, August 31, 2004 (Letter O062)**

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**O062-01**

Acknowledged. See standard response 6.3.1.

**O062-02**

Acknowledged. See standard response 6.19.1.

**O062-03**

Acknowledged. See standard response 6.3.1.

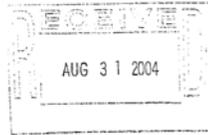
Comment Letter O063

O063

PACIFIC FRIENDS OUTREACH SOCIETY

Quaker Oaks Farm

"A Friendly Gathering Place"



August 30, 2004

California High-Speed Rail Authority  
925 L Street Suite 1425  
Sacramento, CA 95814

Dear Sirs and Madams:

On August 28, 2004, the Board of Directors of Pacific Friends Outreach Society approved the following Minute:

08-04-5 **The PFOS Board joins with the Chamber of Commerce, VEDC, and City of Visalia in supporting High Speed Rail in California. We agree that the alignment should run through Tulare County with a station near the Highway 99/198 intersection.**

O063-1

Pacific Friends Outreach Society is a 501(c)(3) non profit organization incorporated for the purpose of developing and operating an educational and retreat center open to the public in which to demonstrate the Quaker values of peace, simplicity, integrity, community, unity, and equality. Organic produce will be grown and served on site demonstrating a model of sustainable agricultural practices. The facility will be developed and operated using principals of universal design thus assuring the widest accessibility for disabled persons.

High-speed rail service near this project will both enhance access to this facility from many parts of the state and reduce the environmental damage caused by the increasing vehicular traffic through the valley.

Thank you,

Sharlene F. Roberts-Caudle, J.D., LL.M.  
Executive Director to the Board  
Pacific Friends Outreach Society

Cc: Visalia Chamber of Commerce  
Visalia Economic Development Corporation  
City of Visalia

17210 AVENUE 296 • VISALIA, CA 93292  
PHONE (559) 594-4125 • FAX (559) 594-4130 • E-MAIL pfospd@earthlink.net  
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY



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Administration**

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**Response to Comments of Sharlene F. Roberts-Caudle, Executive Director, Pacific Friends Outreach Society,  
August 31, 2004 (Letter O063)**

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**O063-01**

Please see standard response 6.15.4 and standard response 6.21.1.



Comment Letter O064

O064

Rancho Bernardo Community Planning Board
15721 Bernardo Heights Parkway, Suite B-230
San Diego, CA 92128

August 30, 2004

Attn: California High-Speed Train
Draft Program EIR/EIS Comments
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: Comments Regarding the Adequacy of the draft Program EIR/EIS for the Proposed California High-Speed Rail System

Dear Mr. Leavitt and Mr. Valenstein:

The Rancho Bernardo Community Planning Board, a City of San Diego recognized community planning group, has reviewed the Program EIR/EIS for the Proposed California High-Speed Rail System and finds that the draft, as currently prepared, does not adequately address the environmental consequences of the proposed project, nor does it address a reasonable range of project alternatives. In addition, the project description and impact analysis do not provide adequate information to allow the public or the decisionmakers to fully comprehend the scope of the proposal. We believe that the document, as currently prepared, is seriously flawed, both in its evaluation of impacts and in its discussion of feasible mitigation. We therefore request that the document be revised to incorporate an adequate analysis of the issues presented below.

Alternatives

The Council on Environmental Quality NEPA Regulations describe the alternatives section as the heart of the EIS. As such, the alternatives presented in an EIS should be reasonable and implementable, must be given equal treatment, and must provide clear choices for the decisionmaker.

Similarly, the CEQA Guidelines in Section 15126.6 state that an EIR shall consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

This program EIR/EIS fails to consider an adequate range of alternatives. For a project of this magnitude, there are clearly additional alternatives that must be evaluated, including alternative routes, alternative technologies, and alternative designs for achieving the purpose and needs of the project. The Rancho Bernardo Community Planning Board requests that the discussion of alternatives include

Draft Program EIR/EIS Comments
August 30, 2004
Page 2 of 5

an alternative system design in which the high-speed rail system would only be constructed to the edges of the State's major metropolitan areas, rather than extending through them. Under this alternative, passengers could still move quickly from one city to another, but rather than traveling directly to the center of the city, the trains would stop at an appropriate transit center at the outskirts of the city, allowing passengers to travel to their final destination via a variety of existing or new, less costly feeder transit lines, including trolleys, buses, and other existing rail lines. The implementation of such an alternative would substantially reduce the significant, unmitigated adverse effects of the proposed project on community character and visual quality and would avoid additional noise, vibration, and traffic congestion impacts within existing communities.

A specific example of why such an alternative should be considered is that fact that under the current proposal the high-speed rail line would be constructed all the way into the center of the City of San Diego. However, the construction of the line from Escondido south into San Diego would simply replicate SANDAG's current Transit First plans for mass transit in the I-15 corridor. An alternative should be developed that would tie the proposed high-speed rail project into existing and planned transit systems, rather than trying to overlay a redundant service on top of currently planned local projects. If travelers were to take the high-speed train to the Bay Area, wouldn't they transfer from the larger system onto BART when they reached one of the BART transfer stations? Why would this project need to duplicate existing opportunities on the BART? The same is true for the I-15 corridor into the City of San Diego. Wouldn't it be more reasonable, (with less cost and fewer impacts), to take the high-speed rail system south into the Escondido Transit Center, and at that point transfer onto SANDAG's Transit First system, which would provide more convenient access to communities along I-15 corridor and into the center of the city of San Diego? As stated above, we believe that such an alternative would not only be more cost effective, but it could achieve the same project objectives with far fewer significant, adverse impacts to existing communities and the environment.

Project Description

Section 15124 of the CEQA Guidelines requires an EIR to describe a proposed project in a way that will be meaningful to the public and to the decisionmakers. Unfortunately, this document is so general that it is not possible for the affected community members or the decisionmakers to grasp the magnitude of the impacts that could result from the implementation of this project. Although this is a program EIR/EIS that covers the entire state, significantly more effort should have been made in describing how the system would be implemented within each community. It is apparent that little thought was given regarding how this facility would be constructed within various communities. For instance, within the portion of the I-15 corridor that extends from Lake Hodges to Mira Mesa in San Diego County, no right-of-way will be available for new facilities once the current freeway improvements are completed. That will require the development of an elevated rail line through this entire section of San Diego. Specifics regarding the height and design of the structures, how views could be altered or blocked, how the required construction would be accommodated within already overcrowded transportation corridors, and the effects of construction on existing traffic circulation are not provided at an appropriate level of detail to afford meaningful consideration of environmental consequences.

O064-1
cont.

O064-2
cont.

O064-1



U.S. Department of Transportation
Federal Railroad Administration

Comment Letter O064 Continued

Draft Program EIR/EIS Comments  
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Existing Conditions/Project Setting

The discussion of existing conditions is extremely generic in nature and does not provide adequate information to allow for a comprehensive analysis of environmental consequences, even at the programmatic level. This is particularly true with respect to aesthetics and visual resources, noise and vibration, traffic and circulation, and biological resources. Where descriptions are provided for the segment between March Air Base and Mira Mesa, they are generally inaccurate. For instance, the local street system along the I-15 corridor in northern San Diego is described as being constructed in a grid pattern. Due to the existing topography in northern San Diego, which consists of a series of canyons and mesas, no such grid pattern exists. On the contrary, relatively few parallel arterial roadways exist in this area, making traffic congestion on our local freeways that much more significant.

The document also fails to describe the proximity of residential development to the existing freeway corridor, the existing visual amenities within the corridor that could be impacted, and the significant open space areas, such as the Lake Hodges/San Pasqual Valley area and Los Penasquitos Canyon, that would have to be crossed by an elevated rail line.

Descriptions of other existing and planned transit projects in the vicinity of the proposed project have been omitted and an explanation of how the high-speed rail system would interact with these other transit programs should be provided.

Environmental Consequences

Once again, the anticipated impacts of the project are generic in nature and do not adequately address the magnitude of the impacts that could occur along various portions of the alignment. The CEQA Guidelines state that a program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. The content of this document is neither specific nor comprehensive, and as a result, the document should be revised to provide a meaningful description of potential project impacts and associated mitigation measures.

Specifically, the discussion of aesthetics and visual resources fails to take into consideration the surrounding topography when addressing the potential effects of an elevated rail through a community. Little if any analysis of impacts to existing community character is presented, yet the impacts to a community such as Rancho Bernardo would be significant due to the high visibility of an elevated rail line passing through the center of the community. If the rail line were to be elevated between Rancho Bernardo Road and Bernardo Center Drive, it would be visible from a substantial portion of the community and the elevation would be so much higher than the surrounding area that it would not be possible to screen the facility. Because of these conditions, the draft EIR/EIS should have determined that in this portion of the corridor, impacts related to community character and visual quality would be significant and unmitigable.

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As currently prepared, the document fails to disclose the anticipated noise impacts to sensitive receptors along the proposed alignment, particularly in areas where the system would be elevated. The document should clearly describe the incremental noise impacts generated by 120+ mph trains, traveling in both directions, at a frequency of every ten minutes in such locations. The current analysis seems to assume that because noise levels are already high along the I-15 corridor that additional noise can be generated within the corridor without creating new impacts. This is clearly not the case, particularly where the line would be elevated.

It is likely that there are numerous locations along the route where elevating the line would actually place the trains closer to sensitive receptors than they would be if they were constructed at grade. This is clearly the case along the I-15 corridor between Lake Hodges and Mira Mesa. For instance, within the I-15 corridor in the vicinity of Rancho Bernardo, elevating the rail line would place the train at elevations similar to the adjacent homes, which are situated above the existing freeway. The draft EIR/EIS implies that all such noise impacts can be mitigated. How would noise impacts be realistically mitigated in situations such as those in I-15 corridor where the elevations are too high to construct sound walls or other noise reducing structures?

A comprehensive noise analysis should be conducted that takes into consideration the existing elevations of sensitive receptors and the proximity of the line to these receptors, as well as the existing and future noise levels generated from within the I-15 corridor. Further, the cumulative effects of all of the uses within the corridor on adjacent sensitive receptors should be considered.

Too few visual simulation overlays have been provided in the draft EIR/EIS. As a result, none of the examples are representative of the current or planned conditions within the I-15 corridor between Lake Hodges and Mira Mesa. The photographs that are provided give the impression that there is sufficient space to easily insert the high-speed rail lines into the existing freeway right-of-way. These photographs are misleading and do not accurately depict the effects of the project on the surrounding area. The document should include photo simulations that accurately describe how the rail system would realistically fit into the I-15 corridor once the Managed Lanes project is completed.

The potential effects of existing soil problems along the corridor are also inadequately addressed. What could be the effects of increased vibration in areas with known soil problems? For example, in Rancho Bernardo there are ancient landslides present along both sides of I-15.

Mitigation Measures

The discussion of mitigation is extremely generic, with no discussion of how effective specific mitigation measures would be in specific situations. The EIR/EIS should be revised to address specific conditions that would be experienced along the route and incorporate realistic and feasible mitigation measures that would reduce anticipated impacts to below a level of significance. The document should also clearly identify those significant impacts that cannot be mitigated. For example, the visual impacts of constructing an elevated line between Rancho Bernardo Road and Bernardo Center Drive in Rancho Bernardo would be significant and unmitigable.

O064-3

O064-5

O064-6

O064-4

O064-7

O064-8



**Comment Letter O064 Continued**

Draft Program EIR/EIS Comments  
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Project Feasibility

No discussion is provided regarding how rail lines can be accommodate within the footprint of existing transportation corridors. There are steep grades on I-15 through Rancho Bernardo and numerous overpasses and on and off ramps. Can the rail line be elevated above all of these structures? What would that height be? These are only some of the questions that have not been addressed in the draft EIR/EIS with respect to the feasibility. Another important question is whether the mitigation measures suggested in the document are actually feasible and if so, would they be effective in reducing impacts to below a level of significance.

The Rancho Bernardo Community Planning Board believes that there are feasible alternatives to the current proposal that have not been adequately addressed. Alternative designs, such as the one proposed earlier in this letter, would significantly reduce the adverse affects of the project on those communities located along the I-15 corridor in the San Diego region. We respectfully request that additional alternatives be developed and incorporated into a revised draft EIR/EIS. In addition, we request that a more comprehensive analysis of potential impacts to completed in order to provide the public and the decisionmakers with a complete understanding of the consequences to existing communities and the natural environmental of implementing the proposed project.

We appreciate this opportunity to provide comments and request that we be kept informed of future actions associated with this proposal.

Sincerely,



Victoria Touchstone, Corresponding Secretary  
for Jim Denton, Planning Board Chairman

cc: Brian Maienschein, San Diego City Council, District 5  
Assemblyman George Plescia  
State Capitol Building, Room 4009 Sacramento, CA 94249-0075;  
San Diego District Office, 9909 Mira Mesa Blvd., Suite 130, San Diego, CA 92131

O064-9



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**Response to Comments of Victoria Touchstone, Corresponding Secretary, for Jim Denton, Planning Board Chairman, Rancho Bernardo Community Planning Board, August 31, 2004 (Letter O064)**

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**O064-01**

The primary purpose of the HST system is to link the major metropolitan areas of the state. The Authority, and the FRA do not believe that an HST system which terminates in the outskirts of major cities (such as Escondido) would adequately serve metropolitan regions (such as the San Diego metropolitan region). SANDAG, NCTD, MTDB, Caltrans District 11 and the City of San Diego all agree that a statewide HST system must directly serve downtown San Diego. HST ridership potential is highly dependent on the total trip time and the number of transfers. Ridership forecasts estimated a 25% decrease in ridership for a HST system between Los Angeles Union Station (LAUS) to Pleasanton BART as compared to a HST system between LAUS and downtown San Francisco (page 4-20, "High Speed Rail Summary Report and Action Plan", December 1996). HST service to the downtowns of major cities such as San Francisco, Oakland, San Jose, Los Angeles and San Diego and to major airports greatly increase the connectivity and accessibility of the HST system, and enable the system to directly serve major regional transit hubs such as the San Francisco Transbay Terminal, San Jose Diridon Station, Oakland Airport, San Francisco International Airport (SFO), Los Angeles Union Station and the Downtown San Diego Santa Fe Depot. Local services such as BART have many stops and in the case of BART do not permit express services. If the HST system terminated in locations on the outskirts of the major metropolitan areas (such as Escondido), air transportation would be considerably more accessible to intercity passengers than HST service and the HST system would not be competitive with either air transportation or automobile modes in regards to total travel times.

**O064-02**

The Authority and FRA respectfully disagree with your assessment. The alternatives have been designed at a conceptual level of detail that is appropriate with a program level analysis. For the HST alternative, typical sections have been provided which show design assumptions for each segment (please see the "Alignment Configuration and Cross Sections" technical report, January 2004). For the HST alignment along the I-15 corridor between Lake Hodges and Mira Mesa, the environmental analysis at a program level of detail is based on the assumption that the HST system would be on an aerial structure adjacent to the freeway. Should the HST proposal move forward, more detailed preliminary engineering design would be required as part of future project-specific studies.

**O064-03**

Please see response to Comment 3.15.2 regarding the general level of detail in this PEIR/S and the anticipated more detailed project-level, Tier 2 studies. Please see response to Comment O042-1 for more information on the purpose of the PEIR/S and the subsequent studies. See Chapter 3 of the Final Program EIR/EIS for additional information on construction methods (Section 3.18) and additional information on mitigation strategies and "design practices". Impacts to visual resources, noise and vibration, traffic and circulation and biological resources are dependent on specific and precise information regarding location and design of the facilities proposed, as well as the specific operating characteristics (e.g., elevated, at-grade, catenary design features, fencing type and location, speed, etc.), which will be addressed during the subsequent project level environmental review. The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential visual affects. After the alignment is refined and the facilities are

fully defined through project level analysis, and avoidance and minimization efforts have been exhausted, specific impacts and mitigation measures will be addressed.

The descriptions of existing conditions along the I-15 corridor have been revised in the Final EIR/EIS to better reflect the existing transportation system and land uses in the area.

#### **O064-04**

Visual impacts are highly site-specific in nature. These issues will be addressed in greater detail during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed (e.g., elevated, at-grade, catenary design features, fencing type and location, etc.). The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential visual affects. Only after the alignment is refined and the facilities are fully defined through project level analysis, and avoidance and minimization efforts have been exhausted, will specific impacts and mitigation measures be addressed.

The assessment of level of potential impacts between Rancho Bernardo Road and Bernardo Center Drive has been revised in the Final Program EIR/EIS to reflect the existing and future land uses and high visibility of the proposed HST alignment option; however, the potential impacts of specific alignments must be considered in more detailed definition and analysis at the project-level of study, when more specific findings will also be made. See Section 3.9.

#### **O064-05**

Please see response AL072 – 12 regarding the program level noise assessment.

Regarding noise mitigation for elevated sections of HST alignment, several options would be considered ranging from shifting the alignment as far away from sensitive receptors as possible to placement of relatively low sound barriers on the elevated structure.

#### **O064-06**

Acknowledged. Visual simulations are provided for illustration of representative scenarios in the Program EIR/EIS, but are not required; the ones already included in the Program EIR/EIS can be considered conceptual renderings. It may be appropriate to include additional simulations at the project-level when specific facilities and alignments are being analyzed. Please see the “Alignment Configuration and Cross Sections” technical report for schematic renderings of typical sections.

#### **O064-07**

Specific geotechnical constraints and issues will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed, the construction and operation activities that are likely to occur in a given area of concern, and the specific geologic and soil conditions in proximity to the proposed facility. The detail of engineering and the level of geologic exploration developed in project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential impacts.

#### **O064-08**

Specific impacts and mitigation measures will be addressed during subsequent project level environmental review, based on more precise information regarding location and design of the facilities proposed (e.g., specific alignment, right of way corridor width, elevated, at-grade, cuts and fills, etc.). The detail of engineering associated with the project level environmental analysis will allow the Authority to further investigate ways to avoid, minimize and mitigate potential impacts. Only after the alignment is refined and the facilities are fully defined through project level analysis, and avoidance and minimization efforts have been exhausted, will specific impacts and mitigation measures be addressed. However, general mitigation strategies can be defined at the program level of analysis and each environmental area (sections of Chapter 3) in the

Final Program EIR/EIS has been modified to include mitigation strategies that would be applied in general for the HST system. Each section of Chapter 3 also outlines specific design features that will be applied to the implementation of the HST system to avoid, minimize, and mitigate potential impacts.

**0064-09**

The alignment options considered for this segment of the HST system meet the established engineering criteria (Engineering Criteria, 2004). Please also see response to Comment 0064-08.

Mitigation strategies mentioned in the Program EIR/EIS have been applied successfully on other similar projects and would be refined through design and review with the appropriate federal, state and local agencies to be applicable to specific features and placement for each segment of the HST system.

Alternative configurations would be considered as part of the subsequent project level environmental review, as more specificity is defined for proposed alignments and facilities.

**Comment Letter O065**

**O065**



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August 31, 2004

Dan Leavitt  
Deputy Director  
California High Speed Rail Authority  
VIA FAX 916-322-0827

**Re: California High Speed Train System Draft EIR/EIS**

We are pleased to submit a few comments on the Draft EIR/EIS. SPUR believes that California needs a high speed rail project to be completed, for both economic and environmental reasons. However, we believe the design of the route and, in particular, the design and siting of the stations, will determine whether the environmental harms or environmental benefits are greater.

We believe that the EIR/EIS should more thoroughly analyze station location and route options at the community level. Many of the most significant environmental impacts will take place as a result of the land use response to the high speed rail system. To the degree that stations are located within the centers of existing towns, high speed rail will reinforce center-oriented land use patterns in the State; to the degree that stations are located on cheaper land "bypass" alignments, high speed rail will, in fact, stimulate sprawl throughout the state and do more environmental damage than good. While the High Speed Rail Authority does not have land use authority, it is responsible for the route selection and station location. This issue is central to the environmental impacts the project may have.

O065-1

Closely related to the development response to High Speed Rail is the question of station access planning. The Authority needs to take responsibility for planning this dimension of the network. What will the mode split be to and from the stations, and what can be done to minimize the mode share of driving? Again, this question is central to the overall environmental harm/benefit equation of the project.

Thank you for the opportunity to submit these comments.

Sincerely,

Gabriel Metcalf  
Deputy Director

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CALIFORNIA HIGH SPEED RAIL AUTHORITY



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

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**Response to Comments of Gabriel Metcalf, Deputy Director, San Francisco Planning and Urban Research Association (SPUR), August 31, 2004 (Letter O065)**

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**O065-01**

Please see Standard Responses 2.1.12 and 2.31.4. The station sites identified as preferred locations are all multi-modal transportation hubs that would provide links with local and regional transit, airports and highways. It is assumed that parking at the stations would be provided at market rates (no free parking). Each station site would have the potential to promote higher density, mixed-use, pedestrian oriented development around the station. As the project proceeds to more detailed study, local government would be expected to provide for transit-oriented development around HST station locations (through planning and zoning), and to finance (e.g., through value capture or other financing techniques) and to maintain the public spaces needed to support the pedestrian traffic generated by hub stations if they are to have a HST station.

Should the HST proposal move forward, station locations and alignments will be analyzed in site-specific detail as part of future project specific studies.

Objectives of the HST system are to “maximize the use of existing transportation corridors and right-of-way, to the extent feasible” and “maximize intermodal transportation opportunities by locating stations to connect with local transit, airports, and highways (please see Draft Program EIR/EIS, page 1-4).

Although assumptions were made in order to define potential parking impacts, it is beyond the scope of a program level document to know precisely the mode split to and from stations. The assumptions varied from 20% of passengers using private automobiles (i.e. San Francisco) to 80% using private automobiles (i.e. Los Banos). Please see Appendix 1, Bakersfield-to-Los Angeles Traffic, Transit, Circulation & Parking Technical Evaluation for more details. The Authority believes that the best way of minimizing the mode share of driving is to 1) select multi-modal hub station

locations for HST stations; 2) require cities to promote transit oriented development around HST stations if they are to have a station; 3) provide market rate parking at stations; and 4) support improvements to local and regional transit systems. These issues would be further investigated should the HST proposal move forward as part of future studies.

**Comment Letter O066**

From: Steve Burke 209-523-1391 To: High Speed Rail Authority

Date: 8/31/04 Time: 1:29:55 PM

Page 1 of 1

**O066**

Lydia Miller, President  
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Mr. Joe Petrillo  
Chair  
California High Speed Rail Authority  
925 L St., Suite 1425  
Sacramento, CA 95814  
Fax: (916) 322-0827

August 31, 2004

Via facsimile



**Re: Comments on the California High Speed Rail Draft Program EIR/EIS**

Dear Mr. Petrillo:

The DEIR/DEIS is flawed in part because it fails to adequately address, inter alia:

- The possibility of an Altamont Pass alignment as an alternative to tunneling through the more mountainous Mt. Hamilton and Pacheco Pass areas to connect the Central Valley to the Bay Area. The Altamont Pass alignment was the recommended preferred alignment of the Intercity High Speed Rail Commission, the predecessor to the California High Speed Rail Authority (HSRA).
- Growth-inducing impacts
- Impacts on numerous wildlife/habitat conservation projects, including those with partnerships with the state and federal government
- Generation and conveyance of project power, and related impacts
- Impacts to wildlife movement corridors
- Impacts from maintenance facilities

O066-1

This project, and its review, points out the need to have in place a state-wide mitigation program to address the impacts of loss of agricultural land.

Please consider this a written request to inform our groups of all subsequent steps in the environmental review process, and provide the associated information.

Sincerely,

*Lydia Miller*      *Steve Burke*

Lydia Miller

Steve Burke

Cc: Interested parties

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**Response to Comments of Lydia Miller and Steve Burke, San Joaquin Raptor/Wildlife Rescue Center and Protect Our Water, August 31, 2004 (Letter O066)**

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**O066-01**

Please see standard response 2.18.1 in regards to study of the Altamont Pass. Please Chapter 5 of the Program EIR/EIS in regards to potential growth inducing impacts and standard responses 5.2.1 through 5.2.6. Please see standard response 3.15.10 in regards to impacts on wildlife/habitat conservation projects, and 3.15.13 in regards to the level of detail of the Program EIR/EIS. Please see Section 3.5 of the Program EIR/EIS and standard response 3.5.3 in regards to conveyance of project power and related impacts. Please see Section 3.15.3B of the Final Program EIR/EIS and standard response 3.15.3 and standard response 3.15.9 in regards to wildlife movement corridors. Please see Section 2.6.10 "Maintenance and Storage Facilities" of the Final Program EIR/EIS for the maintenance and storage facilities assumptions used for this program EIR/EIS process.

Comment Letter 0067

8/30/2004 11:55 PM FROM: FAX TO: 1-916-322-0827,45 PAGE: 001 OF 004

0067

8/30/2004 11:55 PM FROM: FAX TO: 1-916-322-0827,45 PAGE: 002 OF 004



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August 22, 2004



SIERRA CLUB CALIFORNIA

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

The purpose of this letter is to provide comments on the Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/EIS) for the proposed California High Speed Rail Project. We conclude 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") and the National Environmental Policy Act ("NEPA") 42 U.S.C 4321; 40 C.F.R. 1500.1 for the reasons cited below.

These comments are made in three parts:

THIS LETTER

ATTACHMENT ONE: Comments on the CAHSR DRAFT EIR/EIS
By the Sierra Club/Loma Prieta Chapter

ATTACHMENT TWO: Comments on the CA HSR DEIR/EIS by John Holtzclaw, Sierra Club

High Speed Rail, as a mode of transportation between Sacramento, the San Francisco Bay Area, San Joaquin Valley, Los Angeles San Bernardino and San Diego is worthy of serious study. But, we strongly object to any High Speed Rail corridor being selected through Park, Wilderness or productive agricultural lands. Impacts upon these lands cannot be mitigated and a High Speed Rail program cannot afford the value placed upon their integrity. Plus, we strongly object to advocating stops in small communities before the sprawl inducing impacts of a high speed rail system have been mitigated.

We recognize we are dealing with a \*PROGRAM\* document not a \*PROJECT\* document and once a \*ROUTE\* has been chosen the \*PROJECT\* document, with the expected correct amount of detail, will be produced so that everyone can comment on and get the final alignment revised to be as environmentally neutral as possible. However, we find this Program DEIR/EIS is not adequate for selection of either a preferred route or a network of stations, therefore it can not be the basis for a project.

In reviewing this DEIR/EIS it appears to us that you are examining small portions of the entire system individually, rejecting some on an economic basis without looking at their environmental issues at all. The net result is that the cumulative environmental impacts of a set of end point to end point possible alignments have never been studied, which should be done in the Program Level DEIR/EIS. So, in effect, your piecemeal approach to the Program Level DEIR/EIS has resulted in an analysis with insufficient information to compare the overall environmental impacts of the various possible end point to end point routes.

Sierra Club calls for a revision of the DEIR/EIS and its re-circulation for public comment. You have time to do this right; but if you proceed with a flawed basis for the expenditure of 30+ Billion dollars, you run the very real risk of having the entire idea of High Speed Rail terminated.

8/30/2004 Sierra Club CAHSR DRAFT EIR/EIS Comments

Page 1 of 4

We offer the following pointed and hopefully constructive criticisms of the DEIR/EIS for use in its revision.

1) The Altamont Pass Corridor Must be a Fully Considered Option (See detailed comments in Attachment ONE submitted with and hereby made part of these comments.)

According to the DEIR/EIS, section S.3, "the system should maximize the use of existing transportation corridors..." It is obvious that the Altamont Pass corridor meets this objective better than the three options being considered by the DEIR/EIS, which punch new corridors through the undeveloped Diablo Range. This issue was not acknowledged in the DEIR/EIS. However, the DEIR/EIS did acknowledge that the Altamont Pass corridor would cost the least. Indeed, more was said about the Altamont Pass corridor than any of the other Bay Area to Central Valley options actually under consideration.

0067-1

The DEIR/EIS identified no technical obstacle to the Altamont Pass Corridor; rather it cited a prediction of reduced ridership as justification for its disqualification for further study. Why is it OK to consider a corridor that punches through a State Wilderness but it is not OK to consider an alternative that will not harm wilderness but MAY result in reduced ridership?

2) The Station Specific Urban Growth Potential and Associated Impacts Must be Fully Considered in this DEIR/EIS to Enable Route Choice and Station Locations. (See detailed comments in Attachment TWO submitted with and hereby made part of these comments.)

0067-2

The mitigation for sprawl impacts should be a mechanism within the Project's stop approval process that leaves stations out of the HSR system unless local zoning authorities agree to zone for transit oriented development and anti-sprawl measures around stations. High speed train stations should be financed and built by local authorities, just as they build airports.

3) The DEIR/EIS should evaluate each Route's visual impact by quantifying the miles of exposed corridor and place a higher impact factor to those miles within open space and an even higher impact factor to miles within wilderness areas.

0067-3

It is not adequate to simply name an environmental impact. For example, the DEIR/EIS stated that the two Diablo Range routes would have a visual impact caused by their passage through the State Orestimba Wilderness. This finding is often sufficient for public agencies to reject the routes from further consideration, however the DEIR/EIS does not so state.

4) The DEIR/EIS should evaluate each Route's noise impacts by quantifying the miles of exposed corridor and place a higher impact factor to those miles within urban areas.

0067-4

Sierra Club feels that the use of bypass loops for nonstop trains around San Joaquin Valley Stations would make a relatively small dent in the trains overall noise impacts, while creating the potential for new impacts on wetlands, streams, floodplains, wildlife corridors and agricultural land. The probable environmental impacts of bypass loops have not been sufficiently evaluated to judge them on their merits.

The Club speculates that burying the non-stop service in a trench through the most densely populated urban areas will offer the best noise mitigation benefits to local residents. This option should be fully evaluated in a revised DEIR/EIS.

Alternatively, Sierra Club suggests nonstop trains reduce their speed (to under 150 miles per hour) when traveling through urbanized areas, for both safety and noise reasons.

8/30/2004 Sierra Club CAHSR DRAFT EIR/EIS Comments

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U.S. Department of Transportation
Federal Railroad Administration

Comment Letter 0067 Continued

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...

5) Tunneling would result in a mountain of rock tailing. What is the fate of this material and what are its environmental impacts? The DEIR/EIS should account for these tailings and quantify their impact upon visual, biological, and water resources.

0067-5

6) Tunneling has a history of increasing the rate of water drainage from mountains. In the arid regions of both the Diablo Range and Southern California, a number of threatened species depend on Mountains for their slow release of water throughout the dry season. Tunneling may impact these species and their habitat. The DEIR/EIS must identify these species and their range of habitat. Only then can the revised DEIR/EIS quantify the potential impact of specific Route options.

0067-6

7) Tunneling would not only expose rock tailing to the elements, it would also expose virgin rock on the inside of mountains and concentrated drainage patterns. Both of these factors serve as vectors for the transport of potentially toxic minerals, salts and acids. The DEIR/EIS must identify the compounds released by tunneling, quantify their volume and project their concentration in local streams. The DEIR/EIS should then assess the biological impact of tunneling related to such pollutants.

0067-7

8) Habitat fragmentation is a crucial issue given scant attention in the DEIR/EIS. A revised DEIR/EIS should identify the habitat and range for native species and evaluate Route options relative to this issue.

0067-8

9) A revised DEIR/EIS should evaluate cumulative impact to habitat fragmentation throughout Central and Southern California. For example, evaluation of the Pacheco Pass corridor option should assess the cumulative impact to habitat fragmentation caused by the combination of Highway 152 and the High Speed Rail.

0067-9

Unique San Joaquin Valley Issue

Alignment Options

The Draft EIR/EIS discusses a choice between the UPRR and the BNSF alignments in the stretch between Sacramento, Merced and Bakersfield. Between these two options, the Sierra Club recognizes the greater viability of the UPRR alignment in general.

However, we see a potential for collisions between high-speed passenger trains and derailed freight cars running on nearby existing track along the busy UPRR freight route.

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In light of this hazard, we would appreciate some EIR discussion of a third alignment option, a high-speed rail track generally following the UPRR/Freeway 99 route, but running slightly to the west of the existing track, far enough away to avoid a derailed freight car that has twisted off its course. This alignment option should be reviewed along with the others to find the safest, cheapest, and least environmentally burdensome route through the Valley.

Respectfully submitted,

Kenneth Ryan  
Transportation Issue Chair

8/30/2004 Sierra Club CAHSR DRAFT EIR/EIS Comments

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**ATTACHMENT ONE**  
**ENCLOSED AS PART OF SIERRA CLUB**  
**CALIFORNIA**  
**COMMENTS ON THE CAHSR DRAFT EIR/EIS**  
  
**Sierra Club/Loma Prieta Chapter**  
**8/28/2004**  
**Response Letter: CAHSR- DRAFT EIR/EIS**



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