

Comment Letter 0067 Continued

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

4 GEOLOGY AND HYDROLOGY

The geological and hydrological aspects of the project are very critical, especially for the proposed Diablo/Pacheco routes. The soil formation in this region is very complex and unstable. The proposed routes include extensive tunneling that necessitates an evaluation of the nature of the soil, the consequent construction complications, and the potential unexpected costs.

4.1 Brief Observation of Professor Robert Coleman with Respect to the Geology along the Diablo Mountain Range

Professor Robert G. Coleman, an Emeritus Professor of Geology at Stanford University, reviewed the geological analysis in the Draft EIR/S and had the following observations: "I found the geological sections quite superficial using out of date geologic information. This suggests that no attempt had been made to investigate what problems might exist when carrying out such extensive tunneling. The geology of the Diablo Mountain Range along all of the proposed alignment route options is similar. These crossings all lay within the Franciscan complex that consist of a huge mélange (marble cake mixture) formed in an oceanic trench. The main rock is graywacke sandstone and shale with lesser amounts of greenstone (altered basalt), chert (deep water marine sediments), serpentine, and minor amounts of metamorphic rock called glaucophane schist and eclogite. Unlike other terrains there is no consistency in the relationships between each rock type because these rocks have been broken and dismembered by millions of years earthquake movements with in the oceanic trench and later within in the San Andreas Fault system. Careful geologic and geophysical mapping is required even before tunneling can begin. Major faults parallel the Diablo Mountain Range and still contribute to its geologic deformation that could endanger long-term tunnel and track alignments. The first tunnel to cross the Diablo Mountain Range was the Hetch Hetchy that still carries water from the Sierra Nevada and far as I know has not suffered major earthquake related damage. It would be prudent to learn about any problems on this pipeline within the Diablo Mountain Range. The second tunnel to traverse the Diablo Mountain Range brings water from the San Luis Reservoir across Pacheco Pass into Santa Clara Valley. This is a recent Bureau of Land Management (BLM) project and there should be considerable engineering information on the construction, which would be invaluable in locating any of the tunnels within this crossing."

4.2 Technical Concerns with Respect to the Geological Formation in the Area of the Proposed Alignment Options

Geology is the key factor in determining the tunnels' construction cost. Additionally, geology and the applied tunneling method affect progress (construction duration), which directly affects labor and equipment costs (Please refer to Chapter 2 of this Response Letter for a further analysis of the technical concerns related to construction and the cost uncertainty that this might entail)

GEOLOGY AND HYDROLOGY

4-1

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

The DEIR/S must analyze adequately the geology and hydrogeology in the area of the proposed alignment options and consider the impacts of the construction operation to the environment including the following equipment and installations that are assumed to be located outside the tunnels:

- Turbid water treatment plant and drainage
- Concrete plant (for shotcrete, invert concrete)
- Material handling equipment (e.g., crane/hoist)
- Muck disposal area & loading equipment (e.g., loader/shovel)
- Material yard
- Maintenance yard
- Ventilator
- Power/electric supply
- Water supply
- Explosive magazine
- Parking space
- Site office

4.3 Hydrology and Public Utilities Analysis

The tunneling and cut-and-fill work along the proposed Diablo Mountain/Pacheco alternative routes would cause a potential impact to the surface water, groundwater, water pipelines, and flood control systems. According to the Santa Clara Valley Water District (SCVWD), it would be difficult and challenging to provide sufficient mitigation measures that comply with the Clean Water Act for waters and wetlands, along the proposed Diablo Mountain/Pacheco alignments. The potential impacts listed by the SCVWD are:

- Potential siltation in Anderson and Coyote reservoirs. The adequacy of the project-level analysis with respect to the appropriate mitigation measures is a major concern.
- Potential impact from the proposed southern Pacheco alignment to the watershed of the Pajaro river. According to the SCVWD the upper Pajaro river system plays a critical role to the regional hydrology. Studies and efforts are conducted by the Pajaro Flood Prevention Authority to protect this watershed — specifically the Soap Lake Floodplain Region.
- The Pajaro River is listed under Clean Water Act 303 (d) classification. This classification prompted two Total Maximum Daily Load (TMDL) efforts, one for sediment and one for nutrients. This requires an adequate analysis of the water quality and flood impacts that might result from the proposed Pacheco alignments.
- The proposed alignments might increase the frequency of existing frequent flood events. Therefore, an adequate analysis of the potential impact on flood events is recommended.

GEOLOGY AND HYDROLOGY

4-2

0067-36
cont



U.S. Department of Transportation
Federal Railroad Administration

Comment Letter 0067 Continued

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

- The SCVWD concerns with respect to the impacts on groundwater are:
 - o Tunneling and associated dewatering might impact the directions and pathways of groundwater.
 - o The rise of groundwater table in contaminated soil might cause an absorption of contaminants by groundwater.
 - o Groundwater can also be contaminated by tunneling and drilling.

4.4 Flawed and Inadequate Passages in the DEIR/S Analysis

Project Design:

The DEIR/S considers that the tunneling through the Diablo Mountain Range poses a high potential geologic impact. However, the DEIR/S concludes by stating that potentially high impacts should not preclude the construction of an alternative. Rather, these impacts point to aspects of the project design that would require additional engineering efforts and design adjustments.

This analysis is confusing and indicates a failure to follow an adequate environmental revision prior to making a decision with respect to a preferred corridor. It can be understood from this statement that the alignment route option will be selected irrespective of the nature of the soil. This would certainly result in an inappropriate decision that might entail high risks of construction problems and cost increase. Additionally, this doesn't comply with a satisfactory environmental review that necessitates a thorough analysis of the potential impacts in order to select the most reasonable option.

Mitigation Strategies:

The DEIR/S maintains that development of mitigation measures related to the geology must be developed at a site-specific basis. It is reasonable to think that convenient mitigation measures cannot be selected before a thorough analysis of the soil nature is conducted. However, the absence of the geological and geotechnical knowledge and the corresponding lack of suitable mitigation measures make it impossible to select a preferred corridor. Therefore, the geological analysis provided is inadequate and is insufficient to comply with the DEIR/S objectives for selecting a preferred corridor. A revised DEIR/S is required to provide sufficient knowledge of the soil formation along all the proposed alternative alignment options. Additionally, the revised study should present suitable mitigation measures that can be evaluated to allow for the selection of a preferred corridor, while considering the environmental impacts and the respective costs of mitigation.

0067-36
cont

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

5 SPRAWL AND LAND USE

5.1 Sprawl Analysis

All the proposed Diablo/Pacheco alternative routes between the Central Valley and the Gilroy would be located on new right-of-ways and in undeveloped areas. This is believed to promote sprawl. Sprawl touches nearly on every aspect of the environment including habitat, water, air and water pollution, global warming and resource use. The DEIR/S fails to analyze the critical impact of sprawl that would result from the proposed HSR project. Sprawl impacts many of the CEQA categories, including:

- Land Use and Planning, by occupying 3 to 100 times as much land as Smart Growth.
- Habitat and Species Loss, by converting 3 to 100 times as much land to housing use compared to Smart Growth.
- Conversion of Resource Land to Housing Use, by converting 3 to 100 times as much land as Smart Growth.
- Resources, by increasing consumption of construction materials and fuel by 3 to 10 times compared to Smart Growth.
- Air Quality, by increasing emissions of ozone precursors, particulates and global warming gases from mining, construction and driving by 2 ½ to 10 times compared to Smart Growth.
- Water Quality, by increasing pollution runoff from impervious surfaces and lawn supplements by 3 to 30 times compared to Smart Growth.
- Water and Streams, by increasing the water use by 3 to 30 times compared to Smart Growth.
- Energy Consumption, by increasing mining, construction, driving and heating/cooling energy use by 2 to 10 times compared to Smart Growth.

Sprawl development requires huge areas of land, much higher auto ownership and driving, and building materials, water and heating and cooling energy, with huge impacts on land occupation, water use, species, materials, mining, energy, and land, air and water pollution (*Please Refer to Appendix 8*).

For the three-northern alternative routes, the proposed HSR design does not include stations between Gilroy and the Central Valley. However, for the Pacheco Pass Alternative a proposed Los Banos station would be located in an open field in an undeveloped region. Additionally, the proposed segment between San Jose and Oakland would include a station located near the Auto Mall Parkway. The area near the proposed Auto Mall Parkway station is mostly undeveloped. We conducted preliminary research to investigate the current and planned use of the areas near the proposed Los Banos and Auto Mall Parkway stations:

0067-37



Comment Letter 0067 Continued

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

Los Banos Station:

This proposed station is not located within the city of Los Banos. It is located within the small community of Santa Nella. Most of the area, within Santa Nella community and around the proposed station location, is zoned as A1-Agricultural. There is no mixed use plan for this area.

Auto Mall Parkway:

The proposed Auto Mall Parkway is located in Fremont, at the intersection of Auto Mall Parkway and the Altamont Commuter Express/ AMTRAK Capital Corridor. Currently, the proposed station location is an open space and adjacent to a proposed wetland preserve and city park. The closest development to the proposed location is a 7-million square feet commercial/business area located at 4000 feet. There is no residential area near the proposed station. The zoning in this area includes: Agriculture, General Industrial, and Open Space. Local public transit will be provided to the station. However, although the General Plan includes a connection between the station and the current pedestrian and current bike trails, the Plan will not allow higher population densities and mixed use.

Based on the site investigations and on analytical studies of the causes and impact of sprawl¹¹ both of the proposed station locations (Los Banos and Auto Mall Parkway) identified a potential significant sprawl impact. Besides being in an undeveloped or commercially developed area, neither of these locations has a smart growth zoning within one-quarter mile radius. This issue should be carefully considered and if the potential sprawl impact could not be avoided, the two proposed stations (los Banos and Auto Mall Parkway) should be eliminated from consideration.

5.2 Land Use Analysis

The DEIR/S analysis of local area land use is inadequate and fails to provide the real scale of land-use incompatibility along the proposed Diablo/Pacheco alternative routes.

The DEIR/S states that in general the proposed HSR Alternative would be highly compatible with local and regional plans that support rail systems and transit-oriented development. However, this general statement is not applicable at the level of Bay-Area-to-Merced segment. **All the Diablo/Pacheco routes would potentially be highly incompatible with existing land use**, because these new corridors would primarily pass through agricultural land and parklands (Please refer to *Appendix 9*). The study indicates

¹¹ John Holtzelaw, Robert Clear, Hank Dittmar, David Goldstein and Peter Haas. Location Efficiency: Neighborhood and Socio-Economic Characteristics Determine Auto Ownership and Use---Studies in Chicago, Los Angeles and San Francisco. *Transportation Planning and Technology*, Vol. 25(1),pp 1-27, March 2002. <http://www.tandf.co.uk/journals/online/03081060.html>

SPRAWL AND LAND USE

5-2

0067-37
 cont

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

that the extensive tunneling proposed with these routes would avoid most potential parkland impacts. However, the minimize tunnel option would cross at grade through a portion of Henry W. Coe State Park. Additionally, the new section between the proposed Los Banos Station and the Caltrain/UPRR corridor would pass at grade through agricultural lands, including the Pacheco Creek Valley and Santa Clara Valley. The Gilroy alignment option (Caltrain/Gilroy/Pacheco Pass alignment) would have similar impact levels to agricultural land.

Moreover, the study provides only generalized and inadequate mitigation measures for land use compatibility: *“Local land use plans and ordinances would be further considered in the selection of alignments and station locations. Project-level review would consider consistency with existing and planned land use, neighborhood access needs, and multi-modal connectivity opportunities”* (DEIR/S, Page 3.7-26). All the alternative routes between Merced and the Bay Area present the same incompatibility with the local plans and ordinances. Additionally, most of the area along the Diablo Mountain Range and the Pacheco Pass has the same land use conditions by being either open space or agricultural. Therefore, with the land-use conditions and the available analysis and mitigation strategies, it is not possible to select a preferred corridor between the Bay Area and the Central Valley. Additionally, it is impossible to foresee, at the project-level, an adjustment in the design that would be consistent with the local plans and ordinances.

5.3 Environmental Justice

The DEIR/S demonstrates that the proposed Diablo/Pacheco routes and the proposed Los Banos Station along the Pacheco route would have a significant impact on the minority population and low-income communities, since new right-of-ways are used along these routes. The minority population between San Jose and Merced is estimated at 64%. The DEIR/S affirms that additional consideration of environmental justice would be conducted at the project-level review to address the major impacts and provide detailed mitigation measures. Environmental justice is one of the topics that are vaguely analyzed in this DEIR/S study. This adds-up to the impossibility of selecting at this level a preferred corridor between the Bay Area and the Central Valley.

5.4 Agricultural Resources

5.4.1 Size of Affected Farmlands

Contrary to other environmental topics, analysis of agricultural resources in the Draft EIR/S identified the HSR as causing the highest impact when compared to the Modal and No-Project Alternatives. The highest impact is estimated more specifically for two segments: Sacramento-to-Bakersfield and Bay-Area-to-Merced.

SPRAWL AND LAND USE

5-3

0067-37
 cont



Comment Letter 0067 Continued

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

In fact, passage of the HSR along the proposed alternative route options between Bay Area and Merced would impact 222 hectares for LPI¹² and 312 hectares for GPI¹² compared to 106 hectares that would be affected by the Modal Alternatives. The higher impact of HSR to agricultural resources would result from the new right-of-ways needed for the proposed alignment options. (Please refer to Appendix 9: Land Use Map)

5.4.2 Farmlands Protected by the Williamson Act

The proposed HSR will impact areas of statewide agricultural importance, unique farmland, and prime farmland along the Bay-Area-to-Merced segment. The effected counties are Stanislaus, Merced, Madera, Santa Clara, and San Benito. There needs to be a thorough assessment to determine which areas in each county (Stanislaus, Merced, Madera, Santa Clara, and San Benito) have active areas of agriculture that are protected by the Williamson Act¹³ and subsequent amendments. If any of the proposed areas were used for agricultural purposes within the last 4 years, then any changes from agricultural use will be considered potentially significant. Additionally, any conflict with existing zoning of agriculture will be considered a significant impact. The proposed HSR alternative options along the Pacheco Pass would bisect areas of prime farmland. A thorough analysis is recommended prior to the selection of an alternative option to link the Central Valley to the Bay Area.

5.4.3 Cumulative analysis

In the cumulative analysis of farmland conversion, the DEIR/S compares the existing figures that include the total projected conversion of farmland due to population growth, and adds the additional farmland conversion resulting from the construction of the HSR.

The DEIR/S fails to account, in this analysis, for the additional agricultural land converted due to population growth and urbanization that will result from the development of the HSR or the Modal Alternative. Indeed, the analysis must consider the projected growth that will take place around stations along the new transportation corridors and especially near the proposed Los-Banos and Auto-Mall-Parkway stations.

5.5 Traffic Analysis

The DEIR/S analyzes the traffic and circulation topic with respect to the environmental consequences of the three alternatives — the No Project, the Modal, and the HSR with its different alignments— and the LOS and the V/C ratios for these alternatives is studied, for each segment. A broad scale analysis of the mitigation measures is stated briefly at the end of the section.

¹² The HSR Alternative system-wide alignment combinations with the lowest potential impact are denoted as LPI. The HSR Alternative system-wide alignment combinations with the greatest potential impact are denoted as GPI.

¹³ California Government Code 51200

SPRAWL AND LAND USE

5-4

0067-37
cont

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

5.5.1 Major Points of Concern

The DEIR/S's discussion of the traffic modeling is insufficient to enable critical review of the LOS and V/C results.

The DEIR/S provides a number of detailed LOS and V/C results for specific intersections and roadways. However, the DEIR/S has failed to discuss, either in the DEIR/S itself or in the auxiliary documentation, the assumptions and the specific models that were used to generate the results.

The discussion of V/C and LOS across Alignment Options is cursory and inadequate for determining impact.

The discussion of V/C and LOS across the Alignment Options amounts to little more than half a page of discussion (at page 3.1-15). Omitted is any discussion of an Altamont Pass

option. As discussed above, the model that is used to generate these results is largely opaque, and so the numbers provided give no indication as to whether they are reasonable in magnitude. The Authority needs to provide a more detailed discussion of the basis for the V/C and LOS differences across Alignment Options.

The discussion of mitigation is cursory and fails to discuss feasibility of any particular options.

The discussion of mitigation strategies for traffic, transit, and parking impacts also amounts to only a half page of discussion (at page 3.1-23). However, the discussion of impact that precedes it is not particularly meaningful without an equally detailed discussion of the mitigation options. The Authority needs to provide greater detail as to what mitigation strategies are particularly likely to be feasible, and then it needs to give a detailed discussion of the impact of those strategies. For example, the DEIR/S raises the issue that traffic around many of the proposed HSR stations is already at or beyond capacity, and will only be worsened with the introduction of the HSR stations. As these and other traffic issues have already been identified by the Authority, they merit a detailed discussion of the mitigation issues. Otherwise, in its present form, the discussion of mitigation lends no value to the discussion.

The DEIR/S fails to discuss any changes in air safety that would result from HSR.

Appendix G of the CEQA guidelines requires that changes in air traffic impacts be discussed, as the DEIR/S itself states (at page 3.1-1). While Chapter 3.1 discusses automobile traffic around the airports (e.g., discussing congestion around the San Francisco, Oakland, and San Jose airports at page 3.1-8), it fails to discuss any differences in air safety across the Alternatives, including the Modal Alternative, the No Project Alternative, and the HSR alternative. Such a discussion should be added to fulfill the requirements of CEQA.

SPRAWL AND LAND USE

5-5

0067-37
cont



Comment Letter 0067 Continued

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

The DEIR/S fails to provide any systematic discussion of emergency access.
CEQA (CEQA Guidelines, Appendix G) requires that emergency access issues be discussed, as the Draft EIR/S itself states (at page 3.1-1). Moreover, it appears likely that several of the HSR alternatives, e.g., the Diablo Direct options will have differential impacts regarding emergency access. For instance, the Diablo Direct options all pass through remote and difficult to reach terrain, while the Pacheco Pass and the omitted Altamont Pass options are likely to be more accessible to emergency vehicles. Despite these obvious issues, Chapter 3.1 fails to discuss differences emergency access across any of the Alternatives, including the Modal Alternative, the No Project Alternative, and the HSR alternative, or any of the options within the HSR Alternative such as three Diablo Direct Options. Such a discussion should be added to fulfill the requirements of CEQA.

The DEIR/S does not discuss any potential conflicts with adopted policies, plans, or programs for alternative transportation.
CEQA (CEQA Guidelines, Appendix G) requires that "conflicts with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) be discussed," as the DEIR/S itself states (at page 3.1-1). Chapter 3.1 fails to discuss any potential conflicts with existing alternative transportation policies or plans, nor does it even appear to recognize that these policies or plans could be raised as issues. Such a discussion should be added to fulfill the requirements of CEQA.

0067-37
cont

SPRAWL AND LAND USE

5-6

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

6 CULTURAL AND PALEONTOLOGICAL RESOURCES

The DEIR/S analysis of the cultural and paleontological analysis identified the following concerns:

6.1.1 Affected Sites

Archeological sites: The DEIR/S notes that a record search identified 109 archeological sites in the Bay Area to Merced; including 95 prehistoric sites, 13 historic sites, and one site with both prehistoric and historic archeological components.

Historic Sites: The DEIR/S states that the largest concentrations of historic-era buildings, structures, and objects in the Bay Area to Merced region occur within the urban centers of San Jose, San Francisco, and Oakland, and to a lesser extent, in the rural countryside of the Santa Clara and Central Valleys.

Paleontological Resources: The DEIR/S notes at least 18 fossil-bearing units (formations), an unspecified number of Pleistocene alluvial units, as well as 237 vertebrate fossil localities, of which 93 (40%) are from the Pleistocene age and are of high sensitivity.

"Selection of the Diablo Range direct options would reduce potential impacts on historic structures." (DEIR/S 3.12-20)

The DEIR/S favors the Northern Tunnel Route; however, it does not describe the specific impact of this or other proposed routes on either archeological or historic sites or on paleontological resources beyond relative ratings of "high," "medium," and "low." The "Cultural Resources Architecture Technical Evaluation" provides more information on the different HSR corridor and station options, including the percentage of proposed route developed during an historic period, the estimated known historical resources in APE, and the historic districts or specific high sensitivity resources, as well as the overall ranking, which allows comparison of the relative impacts of different routes on these types of sites and resources.

Similarly, "The Cultural Resources Archeology Technical Evaluation" provides information on the number of archeological sites per region, whether or not it is a traditional cultural property, and an appendix listing the known archeological sites along the corridors, facilitating comparison among routes. Chapter 6, "High-Speed Rail Alignment Options Comparison," offers some additional information on the impact on cultural and paleontological resources by the proposed route for San Francisco to San Jose, Oakland to San Jose, and San Jose to Merced segments. This information includes the number of known "cultural resources" and brief comments as to whether or not the route has a "high sensitivity ranking" for historical architecture in a particular geographic area (e.g., Santa Clara Valley). While Chapter 6 provides some preliminary comparisons of the impacts to cultural resources to be made among the routes, the information is still too vague to discuss specific mitigation strategies.

0067-38

CULTURAL AND PALEONTOLOGICAL RESOURCES

6-1



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

Comment Letter 0067 Continued

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

Number of the Historical Buildings and Archeological Sites:

Chapter 3.12 gives some examples of the number of archeological sites impacted by various alternatives, the percentage of the historic buildings affected, and miles of geologic units affected.

An important drawback of this section is that Table 3.12-1, which depicts the relative ratings for potential impacts on cultural resources, "is based on available information and on CHRIS records, not on field studies." (DEIR/S 3.12-18). Because it is unclear how often the California Historical Resource Information System (CHRIS) database is updated with new information, field study data is an important source of information on new cultural and historical resources found along the proposed area of potential effect (APE). Furthermore, as indicated in the "Bay Area to Merced Cultural Resources: Historic Architecture - Technical Evaluation," the "total number of historic resources that would require identification, evaluation, and effects analysis would depend greatly upon the final APE approved for the selected route."

Chapter 6 notes that the Caltrain corridor from San Francisco to San Jose, as well as the Hayward/Niles/Mulford Line (Oakland to San Jose) and the Hayward Line to I-880 (Oakland to San Jose) have "high percentages of historical development and potential to affect [these structures]" (DEIR/S, Page 6-8). The "Bay Area to Merced Cultural Resources Architecture Technical Evaluation" notes in Table 4-1 that "many NRHP/CRHR- eligible resources [exist] in historic downtown areas between and including San Francisco, [Oakland], and San Jose." Additionally, the Southern Pacific Railroad stations on the San Francisco and 4 tunnels on the Caltrain Alignment also appear NHRP eligible. Similarly, the "Bay Area to Merced Cultural Resources Archeology Technical Evaluation" rates these same areas similarly for NRHP/CRHR eligibility.

However, neither the technical evaluations nor chapter 3.12 provide a detailed number of historic districts, buildings or archeological sites that are in the San Francisco/Oakland/San Jose corridor APE for any of the proposed routes or the modal alternative; despite acknowledging the general locations of the largest concentration of historic-era buildings being in the urban centers of the Bay Area to Merced region.

6.1.2 Impacts of Noise and Vibration on Historical Resources

Chapter 3.12 does not discuss the noise, vibration, and other factors that need to be mitigated by the Authority, if HSR construction is confined to existing corridors that pass through 100% of historic districts in Oakland and other Bay Area/Merced historic districts (currently 6 such districts in the Oakland/Santa Clara/ and San Jose areas alone). Instead, the DEIR/S refers to discussions of noise and visual impacts in Sections 3.4 and 3.9, and in 3.12 relies on its qualitative measures (high/medium/low per linear mile) in the environmental consequences section to give a sense of the number of historic sites affected in the general "Bay Area to Merced" region relative to the "no project" and modal alternatives.

CULTURAL AND PALEONTOLOGICAL RESOURCES
6-2

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

Mitigation Measures: The DEIR/S does not raise or discuss the types of mitigation measures required for affected historic building owners (e.g., installation of double-paned glass to decrease sound, other rehabilitation costs) that would be necessary as a result of having a HSR nearby. As a result, the qualitative rating used to evaluate historic structures in these areas may understate the level of impact on historic structures in urban, populated locations, particularly in terms of cost to historic building owners and tenants/residents who may have to pay for mitigation measures directly affecting their structures. The DEIR/S does not discuss the types of mitigation measures that would be appropriate for a route that would affect archeological and paleontological sites in sensitive areas, particularly Henry Coe State Park, where we count 13 recorded archeological sites along Robinson and Pinto Creeks that would be adversely affected.

6.1.3 Mitigation Strategies

The DEIR/S provides a brief and general discussion of the potential mitigation measures for eligible or listed archeological sites, historic structures and buildings, and paleontological resources. It notes that "additional site specific work would be required during project-level environmental review should a decision be made to proceed with the proposed HSR system."

The DEIR/S does not provide information or assess the number of "listed or eligible" historic structures in the Bay Area/Merced region that would potentially require appropriate mitigation, including, "where appropriate... repair, stabilize, rehabilitate, restore, relocate, [and] reconstruct [sic]." Nor are any estimates of possible mitigation costs related to preserving cultural and/or paleontological sites given for any region or proposed route given. Although the DEIR/S notes that additional analysis is needed to determine appropriate and feasible mitigation measures, based on the current available information it is not possible to evaluate the severity of impacts and the feasibility of mitigation measures for each route. Therefore, selection of a preferred corridor is unattainable at this level of information.

6.1.4 Subsequent Analysis

The DEIR/S notes the additional analysis needed to determine appropriate and feasible mitigation measures. However, it does not provide an estimate of the number of field surveys that may be needed for particular regions or routes, nor does it provide any estimates of the time and labor needed for such an effort, even a minimal effort.

CULTURAL AND PALEONTOLOGICAL RESOURCES
6-3

0067-38
cont

0067-38
cont



Comment Letter 0067 Continued

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

7 COSTS AND OPERATIONS

7.1 Indirect Cost

The DEIR/S assumes that capital costs will be funded through a bond measure, which it asserts imposes no direct costs to the population:

“For the purposes of this analysis, it was assumed that the total cost of the HSR Alternative and the first \$25 billion in cost for the Modal Alternative would be funded through revenue sources that would not require direct tax increases or significant diversion of general fund revenues. Example of these revenue sources include general obligation bonds, federal grants or loans, existing airport user fees and passenger facility charges, private sector participation, local funds (from existing sources), and existing state transportation revenue sources (e.g., gas tax, sales tax on gas).”(DEIR/S, Page 5-9).

This paragraph is self-contradictory. It begins with the phrase that HSR would “not require direct tax increases” and ends with the phrase that revenue sources could include a “gas tax, sales tax on gas.” It is misleading for the DEIR/S to simply call these sources of additional revenue anything other than direct tax increases.

Bond measures do not constitute “free money.” Interest must be paid on the bonds. Interest on bonds can be substantial, especially given California’s current inferior debt rating. As a point of comparison a \$12.3 billion ballot measure (Prop55) is forecast to require principal and interest payments of \$823 million per year. Based on this, paying \$37 billion out of bonds (the current estimated cost of HSR) will cost the state \$2.5 billion per year, not \$0 as assumed by the DEIR/S. Thus in reality the State will have to either raise taxes (or “fees”) or cut spending to pay for the interest; there are no other choices. In addition, with larger bond measures come greater risks to bond investors, and higher interest costs to the state. Thus the magnitude of the bond measure matters in any relevant analysis of profit-loss. In contrast, the current draft DEIR/S explicitly assumes that the magnitude of bond issuance does not matter and ignores the relevant measure of costs, that of interest paid on the bonds necessary to pay for each of the Alternatives (including the HSR alternative, the Modal alternative, and various route options). Such a result cannot be correct.

Since there are no “direct cost” associated with bonds, and since bonds are proposed to be used for the funding, there are no differences in direct costs between different routes. For instance, even though the Diablo Direct routes have much greater tunneling costs (19-20 miles) compared to the Pacheco Pass route (~5 miles), the cost of different routes makes no apparent difference in the consideration of alternative routes. That leads the Authority into an attitude that the differences in costs across different routes are irrelevant when in fact they could be very relevant when indirect costs are considered. An appropriate profit-loss analysis should consider the differences in costs between these different routings.

COSTS AND OPERATIONS

7-1

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

Moreover, an analysis of the current cost estimates ignores the possibility that costs will be substantially more than projected; the rapid increase in costs from \$25 billion a few years ago to \$37 billion present is a concern and no discussion is made of whether further increases can be paid for by additional bond measures.

7.2 Revenues Estimation

One scenario relied upon by the DEIR/S estimates that air travel would be reduced to only one percent of the market. This occurs in part because the DEIR/S fails to consider the competitive response of alternative modes of travel to the introduction of HSR. Because of this omission, the DEIR/S likely overstates both ridership and revenue per passenger, and the DEIR/S revenue projections are likely to be substantially lower than actual revenues.

COSTS AND OPERATIONS

7-2

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cont

