

**Comment 1: Missing Definition of “Property Impacts”**

The EIR does not include the working definition of Property Impacts. It is unclear if this is meant to indicate only those properties that will be acquired through eminent domain, or if the analysis includes potential decrease in property values of properties not taken but adversely impacted, for example, impacts on value of property within reach of sound, vibration, visual, access, impacts; or impacts of those categories on the inhabitants of the properties.

**Suggested fix:** Readdress the 'Property Impacts' section, including a full definition of the scope of the properties included and the ratings used, with more precision and accuracy. Include a description of the anticipated radius of impacts.

**Comment 2: Impact band measures inconsistent**

The summarized potential property impact states a measured distance that is inconsistent with (and smaller than) the distances of potential impacts presented in individual impact sections.

To determine potential property impacts, the land uses within 50 ft of either side of the existing corridor or within 50 ft of both sides of the centerline for new HST alignments were characterized by type and density of development.

The summary impact statement should indicate the widest band among the specific impact area bands inasmuch as property values can potentially be impacted by any single individual measurement as well as cumulative effects. As such, it is reasonable to conclude that impacts might affect properties beyond 50 ft, as demonstrated the wider bands provided by various individual sections. For example, vibration impacts are described on page 3.4-5 of Volume 2 Appendix 3 thus:

“Where speeds are expected to be low, the vibration potential impacts are confined to within 100 ft (30 m) of the track. At top speeds, the potential impacts extend to 200 ft (61 m).”

For noise, the impact area is described on page 3.4-8 indicates that the study area is within 1000 feet of the centerline of the alignments.

**Suggested fix:** increase the summarized *potential* property impact to the maximum band and update the analysis to reflect this more inclusive measure.

**Noise and Vibration**

**Comment 3: Specify Decibel Levels**

The section on Noise impacts does not include actual noise levels expected at the various speeds for the High Speed trains. Suggestion: include a graph of the anticipated noise levels by speed and use those levels in the subsequent analysis and ratings. For example, decibel levels for 125 mph and 220 mph have

been established. Noise analysis should be based on those established numbers.

**Comment 4: Incorporate WHO Standards into Analysis**

The World Health Organization established standards for maximum acceptable noise levels, which the following table summarizes:

Specific environment	Critical health effect(s)	LAeq [dB]	Time base [hours]	LAm <sub>ax, fast</sub> [dB]
Outdoor living area	Serious annoyance, daytime and evening	55	16	-
	Moderate annoyance, daytime and evening	50	16	
Dwelling, indoors Inside bedrooms	Speech intelligibility and moderate annoyance, daytime and evening Sleep disturbance, night-time	35 30	16 8	45
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8	60
School class rooms and pre-schools, indoors	Speech intelligibility, disturbance of information extraction, message communication	35	during class	-
Pre-school Bedrooms, indoors	Sleep disturbance	30	sleeping-time	45
School, playground outdoor	Annoyance (external source)	55	during play	-
Hospital, ward rooms,	Sleep disturbance,	30	8	40

indoors	night-time Sleep disturbance, daytime and evenings	30	16	-
Hospitals, treatment rooms, indoors	Interference with rest and recovery <sup>a</sup>			
Industrial, commercial, shopping and traffic areas, indoors and Outdoors	Hearing impairment	70	24	110
Ceremonies, festivals and entertainment events	Hearing impairment (patrons:<5 times/year)	100	4	110
Public addresses, indoors and outdoors	Hearing impairment	85	1	110
Music through headphones/Earp hones	Hearing impairment (free-field value)	85 <sup>d</sup>	1	110
Impulse sounds from toys, fireworks and firearms	Hearing impairment (adults)	-	-	140 <sup>b</sup>
	Hearing impairment (children)	-	-	120 <sup>b</sup>
Outdoors in parkland and conservation areas	Disruption of tranquility <sup>c</sup>			

**Comment 5: Climate impacts on Noise propagation**

The analysis of noise impacts should include assessment of the climatic differences along the various routes and how such differences (wind, weather, elevation, etc) affect noise propagation. Please elaborate on these issues.

**Comment 6: Correct ratings related to noise impacts**

Page 3.4-13, "Although the HST service in the San Francisco to San Jose (Caltrain) corridor would be going through densely populated communities, the

alignment alternatives in this corridor were rated as having a medium level of potential noise impacts because the HST would be traveling at reduced speeds and the communities would benefit from grade separation improvements for existing services and electrification of the railroad." According to the algorithms given on the previous pages and the tables in the Appendix, this rating is incorrect. With the exception of the areas surrounding the San Francisco and Santa Clara stations, all ratings for sound should be 'High' from SF to SJ, and all ratings for vibration should be 'High' as well.

**Comment 7: Update speeds to current projected values**

Page 3.4-19: "The San Jose to Central Valley corridor is rated as having medium potential for noise impacts. Although the HST system could reach speeds as great as 186 mph (299 kph) through this area," What are the noise impacts now that the Technical Team has announced speeds of 220 mph through Morgan Hill and Gilroy? The announcements were made here:

[http://www.cahighspeedrail.ca.gov/images/chsr/20090810133659\\_BoardPr ezAug09vprint.pdf](http://www.cahighspeedrail.ca.gov/images/chsr/20090810133659_BoardPr ezAug09vprint.pdf) page 13 and in a presentation to Gilroy City Council meeting by Authority consultants on February 1, 2010.

**Comment 8: Noise impact reductions not quantified**

The program level EIR reduced the severity of the potential noise impacts from the assessed values because it factored in the reduction of noise pollution from grade separations. However, this categorical reduction of noise level impacts severity is inappropriate for areas that are not within the impact radius of currently non-grade separated crossings.

**Comment 9: Specify efficacy of sound wall technology**

How many dBs can existing sound wall technology mitigate? Please address in the final EIR the noise levels that are anticipated between SJ and SF and between SJ and Fresno – these were published here:

[http://www.cahighspeedrail.ca.gov/images/chsr/20100120152808\\_FresnoPIMMe etingBoardsvol2.pdf](http://www.cahighspeedrail.ca.gov/images/chsr/20100120152808_FresnoPIMMe etingBoardsvol2.pdf) page 7

Clearly describe (using a table if necessary) the current levels, the anticipated levels at-grade or elevated, and the mitigated levels at-grade or elevated. These are necessary in the Program Level EIR - not to be deferred to the Project Level - if one is to understand and evaluate the noise impacts on the proposed routes.

What are the noise impacts of sound walls and other vertical structures on existing streets which run adjacent to the tracks? Specifically, study the noise impacts on all places where this scenario would happen on the ROW. Will the new structure increase traffic noise by creating a 'bounce' effect?

**Comment 10: Effects of alignment changes on inclines on noise and vibration**

Introducing grade separations on aials introduces inclines. What are the impacts on noise and vibration when diesel freight engines climb these newly introduced hills? Freight trains will operate at night; how will the increase in vibrations or noise affect the surrounding areas, and what is the land use compatibility, particularly in residential neighborhoods?

**Comment 11: Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice**

Appendix 3.7-A, Land Use and Planning Data concludes that Land Use Compatibility is “High”, Community Cohesion Impacts are “No”, and Potential for Property Impacts is “Low”. On page 3.7-3 it states that “single-family residential” homes are “Low” compatibility, so how did it increase to “High” compatibility in the final report:

[http://www.cahighspeedrail.ca.gov/images/chsr/20080324175004\\_Appendix\\_3-7-A\\_DataTable.pdf?](http://www.cahighspeedrail.ca.gov/images/chsr/20080324175004_Appendix_3-7-A_DataTable.pdf?)

On page 3.7-5 of the Land Use link above the report describes “CRITERIA FOR DETERMINING CEQA SIGNIFICANCE”. The first criterion is the potential for the project to physically divide an established community or be incompatible with adjacent land uses. EVERY ONE of the 200+ segments studied along the Caltrain corridor was rated as “NO” impact on Community Cohesion. The definition starts out as: “A potential impact on a community or neighborhood was identified if an alignment alternative would create a new physical barrier...”

□ There are sections where 75-100’ thick, 15’ tall retained embankments are proposed, yet they are not identified as physical barriers. How was a “NO” impact determination made and explain the reasoning.

**Comment 12: Land use compatibility**

The supporting documents for determining compatible land use are out-of-date; some are dated as early as 1990. These are the cities’ General Plans. For example, the 2010 Program EIR cites San Jose’s 1994 Plan. According to the City’s website, the original plan was posted in 1994; it has been updated yearly through 2008. <http://www.sanjoseca.gov/planning/gp/gptext.asp>. In 2009 San Jose began work on their “Envision San Jose 2040” plan. This indicates that 1) the 2010 Program EIR which affects neighborhoods in San Jose is based on obsolete data; and 2) the 2008 Program EIR was based on obsolete data. (2008 Bay Area Program EIR, Pages 14-8, 14-9).

Palo Alto’s Comprehensive Plan was updated in 2007; the EIR cites a 1998 version. The Plan states as one of its major themes, “The community treasures

the special qualities of the City, including its historic buildings, pedestrian scale, high-quality architecture, and beautiful streets and parks. Maintaining the physical qualities of the City is an overarching consideration, incorporated in all parts of the Plan. The Land Use and Community Design Element includes specific provisions to maintain Palo Alto's best features and enhance and improve those areas where these features are lacking." This is not compatible or "Low." Under these assertions, the rebuilding of the San Francisco freeway would have been considered "High" compatibility with no impact to community cohesiveness. ([http://articles.sfgate.com/2009-10-11/opinion/17183391\\_1\\_projects-downtown-neighborhood](http://articles.sfgate.com/2009-10-11/opinion/17183391_1_projects-downtown-neighborhood))

The subheader, Communities and Neighborhoods, does not give an adequate description of potential impacts. Only one example is given. The introduction of elevated structures, catenaries and possible sound walls directly abutting a single-family home could reasonably be considered to have 'potential impact', for example. All potential impacts must be fully discussed. Under the current criteria being used, a country lane could be converted to a grade-separated highway and the impact would be rated as "low."

### **Comment 13: Aesthetics and Visual Resources**

Visual impact of raised berm is rated 'low' however it should be rated 'high' given the Visual Impact metrics. See: [http://www.cahighspeedrail.ca.gov/images/chsr/20080324175050\\_Appendix\\_3-9-A\\_DataTable.pdf](http://www.cahighspeedrail.ca.gov/images/chsr/20080324175050_Appendix_3-9-A_DataTable.pdf) Appendix 3.9-A, pg 1.

The Visual Impact data in Table 3.9.1 is incorrect. The EIR defines "High visual impacts" as those where features of the alignment were obvious and began to dominate the landscape and detract from the existing landscape characteristics or scenic qualities. "Medium visual impacts" are features, which are readily discernable but did not dominate the landscape or detract from existing dominant features.

**All** HSR features along the Caltrain corridor were rated as "Low" with the exception of the pedestrian overpasses at the Palo Alto and Diridon stations. This violates HSRA's own Visual Impact definitions. "Under CEQA, a project would have a significant impact if it would . . . (c) substantially degrade the existing visual character or quality of the site and its surroundings." ". . . a rating of high or medium can generally be considered as significant."

Visual resources are important in each community and each city's visual resources should be inventoried by the Authority. The descriptions and tables do not reflect an accurate count of these resources. Without an accurate count, it is difficult to place a rating on the impacts. Please list the inventory of these

resources so that stakeholders may verify that their interests are recorded. These views will be compromised or obstructed with the introduction of tall aerial structures. In order to measure visual impact, the Authority must categorize these visual resources and evaluate their obstruction or possible obstruction in their report. For example, the Stanford hills, Hoover Tower, the Dish, and the foothills are all visual resources which can be seen and enjoyed from the east side of the proposed corridor. Elevated structures and catenaries are likely to impact the view to those visual resources.

According to the Caltrain Draft EIR

[http://www.caltrain.com/pdf/Electrification/Chapter\\_3.pdf](http://www.caltrain.com/pdf/Electrification/Chapter_3.pdf) page 3-2, "The historic Atherton depot reflects the high visual quality of the surrounding residential area." Atherton was selected as representative of that section of the Caltrain corridor; the HSRA EIR should include this information as well as the visual qualities of ALL of the cities on the corridor.

According to the Caltrain Draft EIR

[http://www.caltrain.com/pdf/Electrification/Chapter\\_3.pdf](http://www.caltrain.com/pdf/Electrification/Chapter_3.pdf) page 3-3, "The Morgan Hill area is representative of the rural context of the southern portion of the railroad corridor. Existing residential areas currently have high quality views looking eastward across fields and the railroad right-of-way to the mountains beyond." HSRA should include this description in the EIR as well as the identification of other cities, such as Gilroy, that have rural context.

Regarding the OCS poles and

wires [http://www.caltrain.com/pdf/Electrification/Chapter\\_3.pdf](http://www.caltrain.com/pdf/Electrification/Chapter_3.pdf), "Residents or business occupants, however, may consider these visual effects adverse. The new OCS infrastructure would be more or less visible from corridor residences and businesses, depending on the visual screening between the rail corridor and adjacent land uses, and on the profile of the rail corridor relative to these other land uses." This information must be captured in the HSRA EIR as it is pertinent.

The City of Palo Alto and residents paid for underground wiring in the mid 1990s along Mariposa Ave. It's part of an expensive city-wide project to invest in improving aesthetics, among other objectives. OCS poles and wires will be more obtrusive than what was removed. The visual impact along this section of Palo Alto should therefore be considered High. The City has plans to eventually complete its underground wiring project for the entire city - implying that the existing poles and wires are an eyesore throughout the city - the visual impact of OCS poles and wires should be rated 'high' for the entire length of Palo Alto.

Caltrain EIR suggests that the visual impact for OCS poles and wires is greater where there are fewer trees to shield the view. The HSRA EIR should reflect this information. For example, the stretch of corridor between California Ave station in Palo Alto and San Antonio Road fall into this category, and should therefore be

rated as High impact. Other streets and cities along the ROW must be studied and the amount of tree coverage should be cataloged and mitigated appropriately.

Will there be new pedestrian bridges at the Caltrain stations or anywhere else along the ROW? If so, presumably they will have overbridge protection barriers. These introduce another form of visual blight that's incompatible with the surrounding. They should be rated as High impact.

What new sources of light will be introduced as a result of the overall project? What will be the various affects of this light and how will it be mitigated? For example, if a new pedestrian bridge is built and it requires light, what is the impact after 5 pm in the winter on homes adjacent to the ROW near the pedestrian bridge that will no longer have tree coverage? What is the effect of light emitting from the train windows on elevated structures? Cumulatively, with the removal of trees, passing trains will light up residential homes in the evening; in particular this might adversely affect 2nd story bedrooms facing the corridor.

Explain the types and heights of noise barriers for grade level, aerial and elevated structures. What visual impacts will these have and, if so, how can they be mitigated? What will be the effects on light planes and can those effects be mitigated? Will they cause shadows to plants in the area? Will they cause shade on homes?

The EIR does NOT describe a typical HSR fences for typical alignments, for example at-grade, on a berm or elevated structure, or with a trench. In order to adequately address the impacts these fences will have, they must be identified and described. These are not project-specific since the number of ways a high-speed rail track can be built is limited to just a few options which will be repeated across the state. Address the visual impacts of the typical fence structures on, for example, residential and multi-family neighborhoods.

### **Comment 15: Hazardous Materials and Wastes**

Caltrain's Final EIR for Electrification has 189 hazardous sites listed in the summary. "A total of 189 known or potential hazardous waste sites were identified within 0.25-mile of the proposed traction power facility locations." These sites should be reviewed and listed in the EIR if they are within distance that they could be affected during construction or operation of the ROW.

### **Comment 16: Cumulative Analysis**

"Cumulative Impacts" is an important CEQA consideration. The cumulative

impacts of constructing two routes into the Bay Area (Pacheco Pass for HSTs and Altamont Pass for local service) have not been adequately addressed. Given the decision by the High Speed Rail Authority to move forward with planning for an Altamont commuter service, the cumulative impacts of that project should be analyzed alongside this project. This particularly important as the **U.S. Environmental Protection Agency's Concurrence on the Least Environmentally Damaging Practicable Alternative** (LEDPA) stated that it was unlikely that the LEDPA would be one that included construction across both the Pacheco and Altamont passes.

The cumulative impacts of both past and proposed major construction projects along the proposed route must be inventoried. This inventory should include things such as the possible electrification of Caltrain's electrification PRIOR to the commencement of HSR construction, and other improvement projects such as California Ave pedestrian underpass, etc. These construction projects – particularly ones, which occur, overnight or on weekends – are incredibly disruptive on residential communities. These noisy construction projects are grouped together and have a cumulative impact which must be addressed and mitigated. Is there a less disruptive alignment available?

Cumulative Impacts on traffic must be identified and mitigated with regard to the construction of the Stanford Hospital Expansion project. This project could add significantly to the traffic situation including significant community disruptions, moving of equipment, etc.

*"CEQA defines cumulative impacts as "two or more individual effects which, when considered together are considerable," and suggests that cumulative impacts may "result from individually minor but collectively significant projects taking place over a period of time" (State CEQA Guidelines Section 15355)." - [Caltrain EIR Chapter 5](#); entire [Caltrain draft EIR](#).*

The Authority should inventory the past, present and potential projects in the vicinity of the proposed route. Some cities have projects which relied on the screening of the trees along the Caltrain corridor as part of their proposal. This brings up issues related to cumulative impact as well as land use compatibility. How will the HSRA mitigate projects which relied on the trees that might be removed during this project?

**Comment 17: Guidelines used by HSRA don't match FRA Guidelines**

In general, the EIR does NOT match the FRA guidelines in the High Speed Train Noise and Vibration Impact Assessment October 2005.

[http://www.fra.dot.gov/Downloads/RRdev/final\\_nv.pdf](http://www.fra.dot.gov/Downloads/RRdev/final_nv.pdf)

**Comment 18: Cost of Altamont vs. Pacheco doubling...**

The cost estimates should only include the costs of the alignments to the meet the high speed rail line that was proposed in the 2005 Program Level EIR. In the case of the Altamont alignments, it should only have the costs of going from the Bay Area to the Central Valley Wye, rather than all the way to Merced. An alternate way to do this would be to compare the total costs of building the system instead of just building the Bay Area to Central Valley alignment.

The Program EIR should also discuss the benefits of having only a small incremental investment required to complete Phase 1 service to Sacramento, as compared to the Altamont alignment.

**Comment 19: East of 101 and Leavesley Road Station**

**The program EIR should evaluate the impacts of alignments between San Jose and Gilroy that are “East of 101”, as well as a Leavesley Road station in Gilroy.**

Current plans are for trains to run at 220 mph through this corridor (see slide 13, [http://www.cahighspeedrail.ca.gov/images/chsr/20090810133659\\_BoardPrezAug09vprint.pdf](http://www.cahighspeedrail.ca.gov/images/chsr/20090810133659_BoardPrezAug09vprint.pdf)). According to the FRA Noise Guidelines, trains at this speed are very loud and the noise is difficult to mitigate because it is low frequency. Very high sound walls (15 feet) would be required and even then it is unclear how much mitigation could be achieved. Given that the program alignments run the center of town, it is very likely that detailed studies will conclude that trains at this speed cannot travel so close to so many

homes.



Picture of current tracks in Morgan Hill.

In fact, Morgan Hill and Gilroy passed a joint resolution endorsing an east of 101 alignment, at least for the section of the route through Morgan Hill.

Gilroy was informed at a February 1, 2010 meeting with High Speed Rail consultants that the required speeds meant that the alignment would have to curve through the downtown, with significant impacts to current downtown businesses. The city of Gilroy is seriously considering an east of 101 station and the current alternatives analysis process for the San Jose- Merced segment has focused on developing detailed plans for such a station. In addition, city officials have been told that they will need to provide more than 6,000 parking spaces (see Technical Memorandum Station Area Parking Guidance California High Speed Rail Authority March 2010), which would be difficult to accommodate in the downtown area.

**Analyze an Altamont alternative with only four tracks in station areas.**

The recently released Alternatives Analysis for the San Francisco- San Jose segment determined that only 4 tracks would be required for tracks at intermediate stations, including those for the commuter rail. In conjunction with new guidance from the FRA on track sharing for incompatible trainsets, this may make possible a reduction in the planned number of tracks.