

# Revised Bay Area Program Level EIR 2010 - Comments and Concerns

This document is a repository of comments and concerns regarding the revised Program Level EIR 2010 for the Bay Area. The list is being used to provide data to the PCC, their cities, neighborhoods and businesses. It may be shared with other cities or individuals. Content may be copied in part or full for use in composing your own EIR comments. In short, you may share and plagiarize freely.

This document is organized into three sections:

- 1) The new EIR which contains only updated sections;
- 2) The previously released EIR which contains all chapters;
- 3) A miscellaneous category for issues which do not fit neatly into any of the given categories or are waiting to be filed.

The main purpose of this document is to make sure no concerns slip through the cracks. Because an issue is on this list does NOT indicate that the issue is covered; issues are considered covered only when they are brought forward in the form of a comment letter sent to the High-Speed Rail Authority.

Questions, concerns, additions and requests for clarifications are welcome. I continually update the content; contact me for the latest copy.

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## Comments can be sent by one of three ways:

1. Regular U.S. mail\* to:  
Dan Leavitt  
California High-Speed Rail Authority  
925 L Street, Suite 1425  
Sacramento, CA 95814  
Attention: Bay Area to Central Valley Revised Draft Program EIR Material Comments
2. Via email\* to: [Hcomments@hsr.ca.gov](mailto:Hcomments@hsr.ca.gov)  
Include a subject line: "Bay Area to Central Valley Revised Draft Program EIR Material Comments"
3. Facsimile (fax) transmission\* at (916) 322-0827

\*Keep a copy of your comments. Send a copy to your city as well so they have a record of what the citizens are asking for or are concerned about relating to the California High Speed Rail Project.

# 2010 Revised Program Level EIR Bay Area to Central Valley

Full report: [http://www.cahighspeedrail.ca.gov/images/chsr/20100304173752\\_hsr\\_ba-cv\\_draft\\_materials\\_mar4.pdf](http://www.cahighspeedrail.ca.gov/images/chsr/20100304173752_hsr_ba-cv_draft_materials_mar4.pdf)

Links to individual chapters are provided below. Their revised EIR document reflects only a few sections which have changed since the previous EIR of 2008. If you have comments which do not pertain to this document, you may comment on the decertified EIR in the next section or post in the Miscellaneous section at the bottom.

## Revised Draft Program EIR Material - Chapters

- **Title Page and Table of Contents** [PDF](#)
- **Chapter 1: Introduction** [PDF](#)
- **Chapter 2: Project Description** [PDF](#)
  1. Page 2-4: "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." - won't the impacts affect properties beyond 50 ft? Why is this number so small? Please change it to 500 ft, or whatever distance makes sense as far as noise, vibration, visual, EMT, etc. are likely to occur.
  2. What happened to the rest of the data in table 2-3 (revised 3.7.3) - San Jose to Menlo Park?
- **Chapter 3: UP Refusal of Right-of-Way** [PDF](#)
- **Chapter 4: Impacts to UP Freight Operations** [PDF](#)
- **Chapter 5: Costs and Operations** [PDF](#)
- **Chapter 6: Network and Alternatives Comparison** [PDF](#)
  1. Page 6-2 "To the extent that grade separation of the HST system would also separate the UPRR line, local traffic conditions would improve in these areas and air emissions would be reduced." Define the extent that grade separations are expected to separate the UPRR line: which crossings are expected to be separated, which are expected to be left alone? This work has been developed during the Alternatives Analysis process. Please include it as it is now known information. If it has not been finalized, give a best estimate. Do not leave this section so open-ended; use the information which the CHSRA has developed and is aware of. Given that information, how will traffic conditions improve? By how much are air emissions anticipated to be reduced?
  2. Page 6-2 "(1) Caltrain – San Francisco to Dumbarton =low;" Explain how the 'low' rating was derived. [We should go back and work these tables from the original doc; they were flawed.]
  3. Page 6-2: "(2) Caltrain – Dumbarton to San Jose =low" Explain how the 'low' rating was derived. [We should go back and work these tables from the original doc; they were flawed.]
  4. Page 6-2: "Overall network alternative rating is low to medium." Explain how the 'low' rating was derived. [We should go back and work these tables from the original doc; they were flawed.]
  5. Page 6-3: "There are 168 known cultural resources." [We should check these with each city and with cultural organizations.]

6. Page 6-3: "Cultural Resources and Paleontological Resources:"  
Given a "moderate sensitivity" rating. 168 known resources seems like a high concentration for track mileage.
  7. Page 6-4: "Property: This network alternative has the potential for a property impact rating between low and medium. Between San Jose and Lick (near Monterey Highway in southern San Jose), the alignment traverses predominately within an existing transportation right-of-way (the Caltrain Corridor). South of Lick within the City of San Jose, portions of the Monterey Highway right-of-way would need to be acquired adjacent to the UPRR right-of-way. Between south San Jose and Gilroy, property acquisition would be required where the HST alignment would be adjacent to the UPRR. East of Gilroy, the alignment would travel through rural land."  
This area is not likely to deserve a 'low to medium' impact rating. [Go through their metrics - more likely this area is 'high'.]
  8. Tables on Page 6-7 have same problems as those on Page 6-2.
  9. Page 6-14, Table 6-7: "To the extent that grade separation of the HST system would also separate the UPRR line"  
Clarify how many grade separations are anticipated to the UPRR line. Use the assumptions which were developed for the 2009 Business Plan, unless there are more accurate, up-to-date, projections available. According to those assumptions, there would be only 4 grade separated crossings between SF-SJ. In other words, overall improvements in local traffic conditions would be negligible, as would any reductions in emissions.
  10. Page 6-14, Table 6-7: Describe how HSR will affect local Caltrain commuter service. How will it affect Caltrain's operations? Would Caltrain be able to continue its well-utilized express service with limited stops?
  11. There are several enormous assumptions being made which restrict the options for providing service from San Jose to San Francisco. Please thoroughly explore options which do not make restrictive assumptions. For example, is it possible to provide service with fewer than 4 tracks. What if Caltrain and CHSRA used compatible train sets?
  12. Page 6-15, Table 6-7: the aesthetic and visual resources are grossly understated. Use the Business Plan 2009 documents which assume that 61 out of 65 grade crossings will be elevated between SF-SJ. Use the technical documents which describe 21' (verify) elevations to clear grade crossings. Use the sound section to estimate the height of the sound barriers. Include the OCS poles and catenaries. With a consistent use of those assumptions, the aesthetic and visual impacts should be rated 'High'.
  13. Page 6-15, Table 6-7: [verify the number of cultural resources. Ask for a list of the resources and compare them with city and local agency/org estimates.]
  14. Ridership models were flawed; using accurate data and projections, revisit the route alternatives. Request that additional routes be studied, for example:
    1. Phasing the construction and service.
    2. East of 101 route instead of Monterey Highway
    3. Altamont – other alternatives?

Cite CARRD's document outlining the heavily reliance on the flawed ridership models when making strategic decisions regarding but not limited to the route.
- **Chapter 7: Preferred Network Alternative** [PDF](#)
    1. Section 7.2.3, SF-SJ Corridor: "It may be necessary to acquire additional strips of property along the existing right-of-way, with the extent and location of property acquisition dependent on the design details for the corridor."

It is highly probable that this need for additional right-of-way will change the ratings for various impacts and land-use compatibility. For that reason, we refer to the 2008 EIR for comments on the accuracy of those tables.

2. Section 7.2.3, "Between San Jose and Gilroy, this alignment takes advantage of the underutilized Monterey Highway transportation corridor by using a portion of this street right-of-way to place HST tracks, thereby greatly reducing the need to acquire private residences or business for locating the tracks."

According to Google traffic maps, this stretch of Monterey Highway is not "underutilized". [Provide specific data in your comments which demonstrate that Monterey Highway is congested.]

3. Page 7-17: "Opposition has been raised to potential impacts for both the Pacheco Pass (impacts on the GEA, Pacheco Pass, the Town of Atherton, Palo Alto, Menlo Park, and Millbrae)," Palo Alto and Menlo Park were added. Do other cities want to be included? Speak now!
4. Page 7-17: "**Ridership and Revenue:** The HST ridership and revenue forecasts done by MTC in partnership with Authority concluded that both the Pacheco Pass and Altamont Pass network alternatives have high ridership and revenue potential."  
These models are based on incorrect data; neither set of data (correct set or used set) were peer reviewed. The models have serious flaws. Redo them. This EIR is invalid if it relies on data that is known to be obsolete, incomplete, false, inaccurate or flawed.
5. Page 7-19 of 2010 EIR: Environmental Impacts. Review these statistics for accuracy and completeness.

- **Chapter 8: Unavoidable Adverse Environmental Impacts** [PDF](#)

1. This EIR relies on obsolete data when more current information is available. For example, it appears from the citations section of the 2010 and 2008 document sets that the material for Chapter 8 has not been adequately updated since 2000. The citation read, "California High-Speed Rail Authority. 2000. High-Speed Train System Business Plan. Sacramento, CA." See the section, "Sources Used in Document Preparation". At least two updated Business Plans have been generated prior to the release of the Draft 2010 Program EIR.
2. **The CHSRA instructed the public to limit their comments to the 2010 EIR. Both sets of documents (Program EIRS for 2008 and 2010) can be intimidating for the average stakeholder to grasp. However, when tables are truncated such as Table 8-1 (Revised Table 9.3-1), the vast majority of people do not have the knowledge or background to search the original document set in search of the missing data – they would have no indication that there is additional data. This comment is not limited to Table 8-1. There are other relevant data which are not carried forward. The public must have access to the full set of information if they are to have a fair, equitable opportunity to respond to the project. Adding this missing data to the Final EIR is not a sufficient mitigation to the problem; it merely has the effect of adding complete data after the fact. The complete information should be available during the public comment period. (See item 5.a below.)**
3. 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).

4. Table 8-1, Revised Table 9.3-1, Summary of Key Environmental Impact/Benefits of Alternatives.
  - a. This table fails to carry forward the data on Noise; Travel Conditions; Energy Use; Farmland; Biological Resources and Wetlands; Hydrology and Water Resources; Public Parks and Recreation, Wildlife and Waterfowl Refuge; Growth Potential; Public Utilities; Geology; Electromagnetic Fields and Interference; and Hazardous Materials.
  - b. The impacts to air quality are not discussed to a sufficient level of detail. The overall air quality benefits of HSR may not be realized when offset by the impacts of construction. The construction impacts should be explored and discussed to the same level of detail as the overall benefits.
  - c. This table and the supporting information is relying on data from 2000, according to the references cited in the 2010 and 2008 EIRs. The data is outdated. There have been significant changes along the proposed right-of-way in the last 10 years; these must be considered when evaluating benefits and impacts. Traffic, land use and visual quality all must be revisited, re-inventoried and reevaluated.
5. List the 79-223 cultural resources along this segment (San Jose to Gilroy) of the proposed route so interested parties may review that they are included in the count.
6. Include other sensitive receptors in this section. For example, schools and preschools, hospitals and medical centers, creeks and streams, parks, visual resources, etc. For each type of sensitive receptor, inventory and list them so stakeholders may verify that their interests are being accounted for.
7.
  - **Chapter 9: List of Preparers** [PDF](#)
  - **Chapter 10: References** [PDF](#)
  - **Figures: Chapter 2** [PDF](#)
  - **Figures: Chapter 3** [PDF](#)
  1. 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 landuse compatibility, particularly in residential neighborhoods?

## 2008 EIR

The previous EIR is here: <http://www.cahighspeedrail.ca.gov/library.asp?p=8052>. Links to individual chapters are provided below. Keep in mind that only a few sections have changed in the 2010 revised EIR above, but we may comment on any section.

[PDF Volume 1 - Preface](#) (40 KB)

[PDF Volume 1 - Table of Contents](#) (123 KB)

[PDF Volume 1 - Summary](#) (420 KB)

[PDF Volume 1 - Chapter 1 Purpose, Need and Objectives](#) (1.5 MB)

1.

[PDF Volume 1 - Chapter 2](#)

Alternatives (225 KB)

1. Ridership - provide accurate models which have been adequately peer-reviewed; complete these studies prior to determining routes.

[PDF Volume 1 - Chapter 3 \(use with PDF Volume 2 - Appendix 3\)](#)

Affected Environment, Environmental Consequences and Mitigation Strategies (39 KB)

1. Be nice to know the total carbon footprint which includes construction and more: the full life cycle of the project.

[PDF Volume 1 - Section 3.1 \(use with PDF Volume 2 - Appendix 3\)](#)

Traffic, Transit, Circulation and Parking (1 MB)

1. Using updated ridership projections, what routes will passengers take to reach the stations, and what affect will it have on local transportation patterns? Parking?
2. Is there an increase in Caltrain's ridership as a result of HSR, and if so, what are the affects of those passengers' commutes on local streets and existing parking?

[PDF Volume 1 - Section 3.2 \(use with PDF Volume 2 - Appendix 3\)](#)

Travel Conditions (355 KB)

1.

• [PDF Volume 1 - Section 3.3 \(use with PDF Volume 2 - Appendix 3\)](#)

Air Quality and Global Climate Change (1.25 MB)

1. Compare this HSR system of the future to autos of the future. (Not sure this is filed in the correct chapter.)
2. Explain and evaluate environmental air quality consequences of carbon emissions for the life of the project, including construction.

• [PDF Volume 1 - Section 3.4 \(use with PDF Volume 2 - Appendix 3\)](#)

Noise and Vibration (3 MB)

1. Noise & vibration from (nightly?) track maintenance (see comments under miscellaneous.)
2. CHSRA docs (I'll cite them) state that the anticipated dBA level on the Caltrain corridor from HSTs will be approximately 93 dB.
3. What is the anticipated noise level \*increase\* from existing conditions?
4. What are the health effects from repeated, sudden loud noises? How do sudden, repeated, loud noises affect people with heart conditions or suffering from stress, among other medical conditions?

5. [Research](#) shows that distraction when learning or concentrating occurs at 40 dBA. This is a significant impact and affects those who reside or work adjacent to the ROW. It will particularly affect schools. This must be noted in the EIR. The inventory of schools and other sensitive activities in the existing EIR is inaccurate and incomplete.
6. Noise studies. Following FRA guidelines? Are noise levels being studied at different ELEVATIONS?
7. If using Caltrain's measures, I'd like to know. They were conducted in a highly biased way in south Palo Alto.
8. How do wind patterns affect noise travel?
9. How does weather affect noise travel?
10. The existing data is inaccurately recorded.  
The Data Tables within the EIR contain a pattern of errors for three areas:
  - 1) Gathering accurate data;
  - 2) Evaluating the data accurately;
  - 3) Recording the findings accurately.
11. Appendix 3.4-A, the Noise Impact Ratings are incorrect. See the chapter for algorithms. (This may be related to item #4.)
12. Appendix 3.4-A, Noise and Vibration Table: the number of Hospitals, Schools and Parkland are all listed as zero between Palo Alto and Santa Clara. This is wrong.
13. 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. [Send email to [rwespi@carrdnet.org](mailto:rwespi@carrdnet.org) for data backing this claim.]
14. Related to the previous point, Figure 3.4-6 is grossly inaccurate.
15. 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?
16. Page 3.4-22: "In most cases the application of appropriately dimensioned noise barriers next to the tracks could reduce potential noise impacts from FRA's severe noise impact category to moderate, and to the no impact category in some locations." What case is the mid-Peninsula? What, specifically, is the anticipated reduction of the severe noise impact? How will it be mitigated, given the width of the corridor, the absence of trees, the height of the homes, and, if possible, the height of the tracks?
17. Page 3.4-27: Mitigation is entirely inadequate. Give a few scenarios (there aren't that many) of at-grade, bermed, aerial and describe potential mitigation for each.
18. Page 3.4-23: "Noise barriers 8–10 ft (2–3 m) tall could be installed where speeds are relatively low (i.e., wheel/rail noise dominates)." Define 'relatively low' speeds. Explain the types and heights of noise barriers for grade level, aerial and elevated structures.
19. 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 are

known and have been published by the CHSRA elsewhere - and how many decibels one can reasonably expect to have mitigated given common sound wall technologies. 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.

"In general, the rules of thumb for sound barriers are easy to remember and fairly accurate: Up to 10 dB of sound reduction is fairly straightforward to obtain. A range of 15-17 dB is practical to obtain. But more than 20 dB of reduction is difficult to obtain, and more than 25 dB is impossible to obtain."

[http://www.soundfighter.com/pdf/Absorptive\\_versus\\_Reflective\\_Noise\\_Barriers.pdf](http://www.soundfighter.com/pdf/Absorptive_versus_Reflective_Noise_Barriers.pdf)

20. Will there be any antennas on any of the rail cars? For WIFI, for example. If so (or possibly so), please study the noise emitted from them. Consider these noise levels when assessing the impacts. Page 4 of

[http://www.acouconsult.ch/documents/3\\_Seville2003\\_DB\\_Audrey\\_Leclere.pdf](http://www.acouconsult.ch/documents/3_Seville2003_DB_Audrey_Leclere.pdf) discusses the problems with roof antennas.

21. 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 in Palo Alto [insert city here] where Alma [insert street here] runs adjacent to the Caltrain ROW. Will the new structure increase traffic noise by creating a 'bounce' affect?

22. Page 3.4-23: "The procedure was repeated for all segments with a medium rating, thereby reducing these HST noise impact ratings to low."

11. Page 3.4-23: "Application of mitigation to the proposed HST system would result in a considerable reduction of potential noise impacts. The estimates obtained from the results of the representative typologies showed noise barriers to be effective in reducing the potential noise impact rating by one category, for example, from high to medium or from medium to low. Consequently, HST Alignment Alternatives with high rating would be adjusted down to, at most, a medium rating."

Provide the data that shows how many dBs the sound walls can mitigate, and that the mitigation will in fact be reduced significantly enough to qualify for the 'low' rating.

- **[PDF Volume 1 - Section 3.5 \(use with \[PDF Volume 2 - Appendix 3\]\(#\)\)](#)**

Energy (391 KB)

- 1.

- **[PDF Volume 1 - Section 3.6 \(use with \[PDF Volume 2 - Appendix 3\]\(#\)\)](#)**

Electromagnetic Fields and Electromagnetic Interference (62 KB)

1. Health effects? We need someone to go through this section and put in plain English what they propose; compare it to what is medically acceptable. What will be emitted near the OCS poles and wires? What's the dissipation rate? At what distance is it safe?
2. Interference with cell phones, TV & radio signals, home appliances, medical and other instrumentation at businesses, schools, medical facilities, etc.?
3. "25-kV AC electrical systems generate electromagnetic fields in the vicinity of all equipment carrying an electric current. Electromagnetic fields create electrical interference in communication and railroad signal cables that run parallel. This phenomenon is commonly known by its acronym, EMT (electromagnetic interference). There is also concern with potential



interference with the operation of private appliances, such as TVs and radios. Some public concern recently has been focused on the suspected public health effects of these electromagnetic fields.

"The strength of an electromagnetic field diminishes rapidly with increasing distance from the 25-kV source be it catenary or substation. Therefore, the extent of effects mentioned in this section will depend mainly on the distance of the affected person or cable from the equipment generating the field, in other words, those people and utilities within the near vicinity of the rail system within the PCS right-of-way. It is possible that electromagnetic fields produced by an electrified rail system could affect electrical communications equipment outside the right-of-way. EMT can be mitigated by the shielding of cables or by other proven techniques." -

<http://www.arch21.org/0800part4.html>

Question: what are the potential interference problems associated with the proposed electrical system, and what are the proposed mitigations? Be specific.

4.

- **PDF Volume 1 - Section 3.7 (use with PDF Volume 2 - Appendix 3)**

Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice (2.4 MB)

1. 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 it's not clear how they make the leap 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).
2. Incidentally, they used a figure of 50 feet on either side of the center line – a 100 foot ROW – as a guide. The ROW along many sections of the Caltrain corridor is less than 100 feet.
3. 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. Their 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. These sections CANNOT be rated as "NO" impact.
4. 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).
5. 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." The CHSRA must acknowledge that the land use compatibility is LOW.

6. 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 sound walls directly abutting a single-family home could reasonably be considered to have 'potential impact', for example.
7. "To determine potential property impacts, the land uses within 50 ft (15 m) of either side of the existing corridor **or** within 50 ft (15 m) of both sides of the centerline for new HST alignments were characterized by type and density of development." Which one is being used – 50 ft to either side or 50 ft of the centerline? There are long sections of the Bay Area segment which align with the JPB right-of-way which are 100 ft in width. This metric does not address property values which abut the route. For example, introducing elevated structures or catenaries against property lines would have considerable impact on the value of those homes. Therefore, rural/suburban category (single family homes) should not be rated 'low' in Table 3.7-2. Furthermore, 'widening of existing right-of-way' in rural/suburban areas should be rated 'high' since partial or full taking of a single family home's property is significant. The same is true for suburban/urban areas.

- **PDF Volume 1 - Section 3.8 (use with PDF Volume 2 - Appendix 3)**

Agricultural Lands (2 MB)

- 1.

- **PDF Volume 1 - Section 3.9 (use with PDF Volume 2 - Appendix 3)**

Aesthetics and Visual Resources (7 MB)

1. Visual impact of raised berm is rated 'low'.  
[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, Visual Impacts Data Table. It's on page 1. These should be rated 'high' given the Visual Impact metrics.
2. 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 their 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."

3. Each city should list their 'visual resources' and submit them to the CHSRA. For example, in Palo Alto there are views of the Dish, the Stanford hills, and Hoover Tower. These views will be compromised or obstructed with the introduction of tall aerial structures.
4. 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; neighboring cities should consider citing this as well.
5. 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."
6. 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."
7. 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 be considered High. Considering that 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.
8. Caltrain EIR suggests that the visual impact for OCS poles and wires is greater where there are fewer trees to shield the view. 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 may be substituted in this comment.]
9. Will there be new pedestrian bridges at the Caltrain stations, and if so, presumably they will have overbridge protection barriers. These introduce another form of visual blight that's incompatible with certain stations. They should be rated as High impact.
10. What new sources of light will be introduced? These will have impact after 5 pm in the winter. For example, pedestrian bridges, train windows on elevated structures. Cumulatively, with the removal of trees, passing trains will light up residential homes at night; in particular will adversely affect 2nd story bedrooms facing the corridor.
11. Page 3.4-23: "Noise barriers 8–10 ft (2–3 m) tall could be installed where speeds are relatively low (i.e., wheel/rail noise dominates)." "Higher noise barriers of 12–16 ft (4–5 m) might be used to reduce noise to taller buildings or where speeds are high in noise-sensitive areas." Define 'relatively low' speeds. Define 'noise-sensitive areas'. Does it include residential neighborhoods? Explain the types and heights of noise barriers for grade level, aerial and elevated structures. What visual impacts will these have?

- [PDF Volume 1 - Section 3.10 \(use with PDF Volume 2 - Appendix 3\)](#)  
Public Utilities (85 KB)

1. The number of electrical substations or power stations in Appendix 3.10-B for Palo Alto to Santa Clara is incorrect. There is one along Park Blvd adjacent to the Caltrain corridor. There may be others. Each city should inventory and correct this figure.

- **[PDF Volume 1 - Section 3.11](#) (use with [PDF Volume 2 - Appendix 3](#))**

Hazardous Materials and Wastes (690 KB)

1. What is the affect of microdust on people, children, vegetation including backyard edible gardens, the health of trees, and pets?
2. How do wind patterns affect the movement?
3. Arsenic is located at Burlingame High School. Do a soil sample study of the adjacent area along the Caltrain corridor. What are the implications on the high-speed rail track usage, maintenance, and construction? Are shoofly tracks planned?
4. What are the affects of repeated vibrations on loosening hazardous materials in the ground?
5. CEQA Guidelines state:

**“§ 21092.6. APPLICATION OF GOVT. C. § 65962.5; DUTIES OF LEAD AGENCY; NOTICE BY ENVIRONMENTAL PROTECTION AGENCY OF FAILURE TO SPECIFY**

(a) The lead agency shall consult the lists compiled pursuant to Section 65962.5 of the Government Code to determine whether the project and any alternatives are located on a site which is included on any list.”

[Government Code Section 65962.5](#) requires the Dept of Toxic Substances Control to compile a list of hazardous waste facilities and underground storage tanks, among other things. Please document these lists within the EIR (or point to where the existing lists are within the EIR documentation) and fulfill the CEQA Guidelines of determining whether the project or any alternatives are located on a site which is included on any list.

- **[PDF Volume 1 - Section 3.12](#) (use with [PDF Volume 2 - Appendix 3](#))**

Cultural Resources and Paleontological Resources (154 KB)

1. Study the wind-breaking effects and benefits of trees along the entire proposed route. Specifically, the row of Eucalyptus trees in Burlingame.
- 2.

- **[PDF Volume 1 - Section 3.13](#) (use with [PDF Volume 2 - Appendix 3](#))**

Geology and Soils (8.5 MB)

1. See note at bottom about arsenic problem at Burlingame High. [Email [rwespi@carrdnet.org](mailto:rwespi@carrdnet.org) for info on CEQA requirements regarding hazardous materials at school sites. 3/25/10]
- 2.

- **[PDF Volume 1 - Section 3.15](#) (use with [PDF Volume 2 - Appendix 3](#))**

Biological Resources and Wetlands (4.18 MB)

1. Put the information in section 3.15 on acreage in table format. It's very difficult to compare and appreciate the differences between proposed routes and the effect they have on wildlife acreage when the numbers are strung together in paragraph form.
2. Figure 3.15-4 shows only southern section from San Jose south; Pacheco route. What about Altamont and East Bay map?
- 3.

- [PDF Volume 1 - Section 3.16 \(use with PDF Volume 2 - Appendix 3\)](#)  
Section 4(f) and 6(f) Resources (Public Parks and Recreation) (2 MB)
  1. The tables do not reflect an accurate count of public parks.
  - 2.
  
- [PDF Volume 1 - Section 3.17 \(use with PDF Volume 2 - Appendix 3\)](#)  
Cumulative Analysis (3 MB)
  - 1.
  - 2.
  
- [PDF Volume 1 - Section 3.18 \(use with PDF Volume 2 - Appendix 3\)](#)  
Construction Methods and Impacts (85 KB)
  1. Dust, arsenic, etc.
  2. Describe in further detail the shoofly tracks. Acreage needed, property takes, street access, detours, etc.
  3. Impact of construction on local businesses?
  
- [PDF Volume 1 - Chapter 4](#)  
Costs and Operations (714 KB)
  1. Track maintenance. (See under Miscellaneous.)
  - 2.
  
- [PDF Volume 1 - Chapter 5](#)  
Economic Growth and Related Impacts (913 KB)
  1. What will be the effects on businesses during construction? Will smaller businesses be able to survive during the construction process? How many jobs may be lost as a result of the construction? How many businesses are along the proposed route, and how many people are employed? How much tax revenue will cities lose as a result of construction?
  - 2.
  
- [PDF Volume 1 - Chapter 6](#)  
HST Station Area Development (44 KB)
  - 1.
  - 2.
  
- [PDF Volume 1 - Chapter 7](#)  
High-Speed Train Network and Alignment Alternatives Comparisons (25 MB)
  1. The ridership models must be accurate in order to conduct a meaningful comparison of alignment alternatives.
  - 2.
  
- [PDF Volume 1 - Chapter 8](#)  
Preferred Alignments and Station Options (2 MB)

1. The ridership models must be accurate in order to conduct a meaningful comparison of alignment alternatives.
- 2.

- [PDF Volume 1 - Chapter 9](#)

Unavoidable Adverse Environmental Impacts (68 KB)

1. [Table 9.3-1, Summary of Key Environmental Impact/Benefits of Alternatives.](#)
  - a. 'Air quality' does not adequately address construction impacts. Potential impacts are listed as 'N/A'. It's possible that construction impacts on air quality will not be recaptured for several decades. This needs to be studied and reported. The 2010 EIR brushed over this, too.
  - b. 'Land Use' compatibility is reported to be 'potentially significant' without HSR, and 'potentially less significant' with the introduction of HSR infrastructure constructed through dense residential areas. This is inaccurate; it implies that maintaining the status quo is a more significant impact on *land use compatibility* than introducing berms, aerials, catenaries, increased rail traffic and other elements of high-speed rail.
  - c. 'Visual Quality'
2. 9.1.3, Construction Impacts. The impacts to air quality are not discussed to a sufficient level of detail. The overall air quality benefits of HSR may not be realized when offset by the impacts of construction. The construction impacts should be explored and discussed to the same level of detail as the overall benefits. The over benefits which include the full lifecycle of HSR should be disclosed.
- 3.

- [PDF Volume 1 - Chapter 10](#)

Public and Agency Involvement (94 KB)

- 1.
- 2.

- [PDF Volume 1 - Chapter 11](#)

Organization, agency and business outreach prior to draft program. (41 KB)

1. Has there been any prior to this de-certified draft EIR?
- 2.

## Bay Area to Central Valley Final Program EIR/EIS Volume 2: Appendices

- [PDF](#)

**Volume 2 - Complete (Except Appendix 2 D)**

Complete text for Volume 2 (27.5 MB)

- [PDF Volume 2 - Appendix 2 A-C](#)

Detailed Descriptions of No Project Alternatives (155 KB)

- [More Volume 2 - Appendix 2 D](#)

- [PDF Volume 2 - Appendix 2 E](#)

Cross Sections (7.5 MB)

1. All diagrams in Appendix 2 E show cross sections for the Caltrain corridor as a SFFS configuration (2 Caltrain tracks sandwiching 2 HSR tracks). How will this affect Caltrain's operability? Specifically, I'm concerned about Caltrain's future flexibility in providing express service, which relies on access to passing tracks in order to overtake trains. Local commuters are best served by a FSSF configuration; SFFS does not serve the local commuters' needs. In the [JPB Board of Directors Meeting minutes of Sep 4, 2008](#) Bob Doty reported that "There is a direct correlation between the average run time and passenger ridership. The only way to improve the runtime on this railroad is to reduce the number of stops." Please explain the impact on Caltrain service, operability, revenue and future flexibility in meeting local commuter needs. Is the introduction of HSR compromising our local transportation system?
2. The ROW widths proposed for the Caltrain corridor are approximately 100 feet. How will that impact the cities of Menlo Park, Palo Alto and Atherton where widths are less than 100 feet? What is the landuse compatibility with those residential neighborhoods, given the inadequate space available for the proposed designs?
3. Appendix 3.3-A: Explain the sources for the TOG Emission Burden tables. Specifically, what kind of road vehicles were used for the comparison? Vehicles of the past (SUVs) or future (Prius, etc.)? [Might have to read the accompanying chapters to discover the answers to this one and better phrase the question.]
4. Appendix 3.3-A: For the emission data, how were the regions divided geographically? San Francisco Bay and San Joaquin Valley are the only two regions compared; what are their boundaries? Are the borders drawn fairly for comparing and evaluating Pacheco vs. Altamont?
5. Appendix 3.3-A: Explain the "Annual Direct Energy Consumption" table and associated CO2 energy analysis: what assumptions were made about the fuel efficiency of road vehicles?

- [PDF Volume 2 - Appendix 2 F](#)

Station Fact Sheets (13 MB)

1. San Jose station - why so many tracks? Is it really necessary?

- [PDF Volume 2 - Appendix 2 G](#)

Alignment Alternatives and Station Location Options Eliminated from Further Consideration (1.6 MB)

- [PDF Volume 2 - Appendix 3 - this is an important chapter!!](#)

Appendices for Chapters 3 Impacts Analysis (2.7 MB)

**IMPORTANT: This chapter contains critical data including a discussion of noise, vibration, visual impacts, land use compatibility, public utilities, plants, wildlife, groundwater tables, geology, cultural resources and more.**

No build VMT & VHT - emissions

1. Appendix 3.3-A: Explain the sources for the TOG Emission Burden tables. Specifically, what kind of road vehicles were used for the comparison? Vehicles of the past (SUVs) or future (Prius, etc.)? [Might have to read the accompanying chapters to discover the answers to this one and better phrase the question.]
2. Appendix 3.3-A: For the emission data, how were the regions divided geographically? San Francisco Bay and San Joaquin Valley are the only two regions compared; what are their

boundaries? Are the borders drawn fairly for comparing and evaluating Pacheco vs. Altamont?

3. Appendix 3.3-A: Explain the "Annual Direct Energy Consumption" table and associated CO2 energy analysis: what assumptions were made about the fuel efficiency of road vehicles?

- [PDF Volume 2 - Appendix 4](#)  
Capital Cost Information (2.3 MB)
- [PDF Volume 2 - Appendix 8-A](#)  
Staff Recommendations: Preferred Network Alternative, HST Alignment and Station Locations (2.6 MB)
- [PDF Volume 2 - Appendix 8-B](#)  
U.S. Environmental Protection Agency's Concurrence on the Least Environmentally Damaging Practicable Alternative. (369 KB)

## Bay Area to Central Valley Final Program EIR/EIS Volume 3: Comments & Responses

- [PDF Volume 3 - Title Page](#) (10 KB)
- [PDF Volume 3 - Table of Contents](#) (62 KB)
- [PDF Volume 3 - Chapter 18](#)  
Introduction (31 KB)
- [PDF Volume 3 - Chapter 19](#)  
Standard Responses to frequently raised comments (236 KB)
- [PDF Volume 3 - Chapter 20](#)  
Response to Comments from Federal Agencies (2 MB)
- [PDF Volume 3 - Chapter 21](#)  
Response to Comments from State Agencies (3 MB)
- [PDF Volume 3 - Chapter 22 1-28](#)  
Response to Comments from Local Organizations (by comment number) (8 MB)
- [PDF Volume 3 - Chapter 22 29-36](#)  
Response to Comments from Local Organizations (by comment number) (6 MB)
- [PDF Volume 3 - Chapter 23](#)  
Response to Comments from Organizations (by comment number) (6 MB)
- [PDF Volume 3 - Chapter 24](#)  
Response to Comments from Individuals (by comment number) (4 MB)
- [PDF Volume 3 - Chapter 25](#)  
Public Hearing Comments (15 MB)
- [PDF Volume 3 - Chapter 26](#)  
Web Comments (413 KB)

### Miscellaneous

Topics which don't fit neatly into any chapter, topics which weren't covered, topics reference by more than one chapter above, and questionable items. Also, items to be filed under their chapter headings.



2. Track maintenance: describe it, including the frequency, duration, equipment to be used, time of day (or night) that it will be conducted, and impacts on surroundings including noise and vibration.
3. Maintenance of electrical system: describe it, including the frequency, duration, equipment to be used, time of day (or night) that it will be conducted, and impacts on surroundings including noise and vibration.
4. Ridership: use peer-reviewed ridership models. (Flush this out and make reference to it in all the relevant sections. Contact [rwespi@carrdnet.org](mailto:rwespi@carrdnet.org) for a partial list of where the EIR referenced and relied on the inaccurate ridership models.)
5. Arsenic, specifically at Burlingame high school. Other sensitive locations? This is a concern for shoofly tracks in particular. Do a soil sample study along the Caltrain corridor next to the high school. (File this in the appropriate chapters above.)
6. Every city should take an inventory of their sensitive areas (schools, parks, hospitals, streams, views, historic landmarks) and verify that the EIR has included them in their tables. It is known that several are missing.
7. Integrate these comments, as needed: <http://greatereastcarlos.org/2010/03/07/caltrain-hsr-sctv-eir-feedback/>
8. File the comments from this link <http://www.arch21.org/0800part4.html> into the appropriate chapters. It includes the visual impacts of catenaries and how hard it is to mitigate unless perhaps with trees on either side - as long as they don't interfere with operations.
9. "25-kV AC electrical systems generate electromagnetic fields in the vicinity of all equipment carrying an electric current. Electromagnetic fields create electrical interference in communication and railroad signal cables that run parallel. This phenomenon is commonly known by its acronym, EMT (electromagnetic interference). There is also concern with potential interference with the operation of private appliances, such as TVs and radios. Some public concern recently has been focused on the suspected public health effects of these electromagnetic fields.

"The strength of an electromagnetic field diminishes rapidly with increasing distance from the 25-kV source be it catenary or substation. Therefore, the extent of effects mentioned in this section will depend mainly on the distance of the affected person or cable from the equipment generating the field, in other words, those people and utilities within the near vicinity of the rail system within the PCS right-of-way. It is @ possible that electromagnetic fields produced by an electrified rail system could affect electrical communications equipment outside the right-of-way. EMT can be mitigated by the shielding of cables or by other proven techniques." -

<http://www.arch21.org/0800part4.html>

10. Where will traction power substations be located? What affects do they have on health, communications equipment, cell phones, radio or TV signals, home appliances? Other? Please note the impact rating of these substations.
11. Page 2-4: "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." - won't the impacts affect properties beyond 50 ft? Why is this number so small? Please change it to 500 ft or 2,000 ft, or whatever distance makes sense as far as noise, vibration, visual, EMT, etc. are likely to occur.
12. Page 2-4: Why is the impact distance 50 ft in this section, but elsewhere (or in CEQA/NEPA Guidelines) a figure of 2,000 ft is used for historical resources? Furthermore, if substations emit noise to at least 100 feet, why doesn't 'property impact' reflect this? If the location of the

substations is unknown, then a conservative approach would be to use 100 feet throughout the project rather than 50 feet.

13. "There will be some noise from substations - 40-50 dBA at 100 feet, but this can be mitigated by sound walls, or by placement of the substations in areas where there are no sensitive receptors." <http://www.arch21.org/0800part4.html> What noise level do substations emit? What mitigation is planned? Where will they be located? How will they affect the surroundings at each of those locations?
14. Page 6-2 of 2010 EIR: "(1) Caltrain – San Francisco to Dumbarton =low;" Explain how the 'low' rating was derived. [We should go back and work these tables from the original doc; they were flawed.]
15. Page 7-19 of 2010 EIR: Environmental Impacts. Review these statistics for accuracy and completeness.
16. Ask Harvey Darnell, chairman of the Greater Gardner Neighborhood Action Coalition, about track maintenance. He mentioned Caltrain's track maintenance system and the fact that HSR tracks must be maintained nightly. [http://www.mercurynews.com/san-jose-neighborhoods/ci\\_14650668](http://www.mercurynews.com/san-jose-neighborhoods/ci_14650668)
17. Using accurate ridership numbers and the proposed train schedule, and using the anticipated dB levels for steel on steel wheels at 125 mph (93 dBA), analyze and describe the noise levels and frequency. Use the existing proposed elevated structures as diagrammed in the 2008 EIR; pay particular attention to areas where the tracks are proposed to be elevated. Do a mile-by-mile landuse compatibility with the proposed elevations and the anticipated noise levels for those structures.
18. 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 landuse compatibility, particularly in residential neighborhoods?
19. ***"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](#). Cities should inventory the past, present and potential projects in the vicinity of the proposed route. Some cities such as Palo Alto have projects which relied on the screening of the Caltrain corridor as part of their proposal. This brings up issues related to cumulative impact as well as land use compatibility.
20. What about the cumulative impact of noise, vibration, visual blight, trees, etc. For example, what is the cumulative impact from [city or street] to [city or street] of [list the impact categories]. Or, ask for a table which describes the cumulative impacts of the individual effects. Further, ask for a map which shows the cumulative effects in red-green-yellow like their other impact maps.
21. Caltrain EIR anticipated "eighteen proposed traction power facility sites (four are alternate sites), an electrical feeding point". HSR would presumably have approx 18 as well. Where will they be located? What's the visual impact; noise impact; health impact?
22. Caltrain EIR has a list of archaeological resources; are these noted in HSR's EIR? [http://www.caltrain.com/pdf/Electrification/Chapter\\_3.pdf](http://www.caltrain.com/pdf/Electrification/Chapter_3.pdf) page 3-40.
23. Caltrain EIR identified 24 properties which could be listed in NRHP. (Historical resources.) Are they noted in HSR? Were they notified of the project? Have additional properties been added to

the registry since that 2004 Draft EIR?

[http://www.caltrain.com/pdf/Electrification/Chapter\\_3.pdf](http://www.caltrain.com/pdf/Electrification/Chapter_3.pdf) page 3-42.

24. Figure 3.4-6, although grossly inaccurate, is a useful visual tool for assessing noise impacts. Please create separate figures for Visual, Land Use Compatibility, and Potential for Property Impacts - each.
25. Page 3.4-23: "The cost of constructing a noise barrier on one side of a rail line is estimated at approximately \$1 million per mi (\$625,000 per km) for a concrete wall of 12 ft (4 m) in height. Conservatively, a unit cost of \$1.5 million per mi (\$937,500 per km) was applied to portions of the HST Alignment Alternatives with high potential noise impact ratings."  
Please consider these costs when evaluating the cost of tunneling. Furthermore, a conservative cost would be closer to \$3 million if both sides of the rail line get noise barriers.
26. What are the impacts of sound walls and other vertical structures on existing streets which run adjacent to the tracks? Specifically, study the impacts in Palo Alto [insert city here] where Alma [insert street here] runs adjacent to the Caltrain ROW. Will the new structure increase traffic noise by creating a 'bounce' affect?
27. If the ACE corridor is going to be built for HSR anyhow, what is the comparison between 1) laying HSR tracks through Pacheco and 2) upgrading that ACE corridor plan from medium speed to high speed? The Bay Area route decision appears to be between introducing HSR to two geographic areas - one high speed (Pacheco Pass) and one reduced speed (Altamont Pass) - or one high speed (Altamont Pass). Compare the environmental impacts of two vs. one route across the region.
28. [HSR design standards](#) for reference.
29. Where in the EIR is 'Property Impacts' clearly defined? Does the definition include property takes; or property values of 'leftover' properties which are adjacent but not taken; or impacts on value of property within reach of sound, vibration, visual, access, construction, etc.; or impacts of those categories on the inhabitants of the properties? Without knowing the precise definition of 'Property Impacts', rating the impact is meaningless. Readdress the 'Property Impacts' section, including the ratings, with more precision and accuracy. Include a description of the anticipated radius of impacts; the number of feet used should be the greatest value of the various impacts.
30. **Table S.8-1. Summary of Characteristics and Impacts for the Network Alternatives**  
This table looks suspect. Pull out the numbers for the first columns of each alignment and compare the values for the distances that are unique to Altamont, Pacheco, and overlap. They don't add up. For example, Farmland, Include Lengths (miles) to make sense of this table.
31. "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. If the Altamont Pass is being considered for local service, what are the *additional* impacts of routing through Pacheco Pass compared to upgrading the local service on Altamont Pass to full HST service? The EPA has expressed concern in their comment letter; their concerns were noted as significant in the EIR summary. The concerns were not adequately addressed in the body of the EIR. (See Table 3.17.1 to verify the validity of this comment.)
32. Caltrain's Final EIR has 189 hazardous sites listed in the summary. Check the body of the doc to see if they list the sites. If not, request the list.  
"A total of 189 known or potential hazardous waste sites were identified within 0.25-mile of the proposed traction power facility locations."
33. Cumulative impact of Caltrain's electrification construction, their earlier grade sep and other improvement projects such as California Ave pedestrian underpass, and other major construction projects in the vicinity of the proposed route. These construction projects –

particularly ones which occur overnight or on weekends – are incredibly disruptive on residential communities. One every 10 years is MORE than enough. These noisy construction projects are grouped together and have a cumulative impact which must be addressed and mitigated. Please inventory the major construction projects – past and proposed – along the proposed route. Is there a less disruptive alignment available? [Cities should work towards creating that inventory in the form of a scoping comment.]

34. NOTE: each city should inventory the following and ask that they be included: publicly owned parklands, recreation lands, wildlife and waterfowl refuges, and historic sites. (Section 3.16)
35. Table 3.16-3 Summary of Potential Impacts on Section 4(f) and 6(f) Resources  
Section 4(f) Parks/Recreational Resources  
SF-Dumbarton: 4-H, 8-M, 5-L.  $4+8+5=17$  total; this can't be right.  
Dumbarton-SJ: 6-H, 4-M, 3-L =13 total; also sounds low.
36. Known Historical Resources Within 500 Feet of Centerline and Overall Ranking of Alignment Alternative (H,M,L)  
SF-Dumbarton: 51 – H  
Dumbarton-SJ: 34 – H
37. Fencing – what visual impacts?
38. Power substations –visual, health, sound.
39. Mitigation plan for storm water runoff during construction.
- 40.

***For any issue that is of concern, request that the CHSRA include data in the final EIR which backs up how they've reached their conclusions. Many of their responses to public comment in earlier EIRs simply state that "the CHSRA has determined that..."***

***Sara, these are all new:***

8. Evaluating the cost of Altamont Pass vs. Pacheco Pass must take into consideration the fact that a stretch of the Altamont route would include part of the full system build-out to Sacramento. This 40-50 mile stretch from Merced to approximately Modesto will lessen the overall cost and environmental impacts, compared to the Pacheco route which would eventually require both to be built. The approximate track distance comparisons are 100 new miles for Pacheco (and additionally the feeder route along Altamont) plus 40 miles when building out to Sacramento, or 100 new miles for Altamont, minus 40 miles when building out to Sacramento (and eliminating the need for the feeder route). The Altamont route provides a cost savings to the state.  
Pacheco full build-out miles:  $100+40+70+\text{feeder}$ .  
Altamont full build-out miles:  $100+70$ .  
(Doesn't include distance from San Jose to San Francisco since these are equal.)
9. The tables in the 2008 EIR