These responses are intended to follow the comments as set forth in the City's comment letter, using the City's numbering and headings for ease of reference.

1. Alternatives

The City's letter offers several comments on the Draft Program EIR/EIS alternatives.

Alternatives Terminating in San Jose or Union City: Regarding the comment that the Authority should continue to consider alternatives that would terminate the HST system in either Union City or San Jose, the Authority carried several such alternatives into the Final Program EIR/EIS. Chapter 7 of the Final Program EIR/EIS synthesized that analysis for the following:

- Altamont Pass Network Alternative with San Jose Terminus
- Altamont Pass Network Alternative with Union City Terminus
- Pacheco Pass Network Alternative with San Jose Terminus

Chapter 8 of the Final Program EIR/EIS explained that terminating the statewide HST system at San Jose or Union City would not meet the Purpose and Need of the statewide HST system as follows:

> A number of network alternatives clearly do not meet the purpose and need for the HST system. The Altamont Pass network alternative that terminates in Union City fails since it does not provide direct HST service to San Francisco, Oakland, or San Jose (the major Bay Area cities) nor does it provide interface with the major commercial airports. Also failing are a Pacheco Pass network alternative that terminates in San Jose and three Altamont Pass network alternatives that only serve one of the three major urban areas/centers. These four alternatives directly provide HST service to at most only one major Bay Area city and one of the region's major commercial airports.

At its meeting on July 9, 2008, the Authority concurred in this staff conclusion, finding that the network alternatives with a terminus in Union City or San Jose did not adequately meet the project purpose and need or primary project objective because they would serve none (for Union City terminus) or only one (for San Jose terminus) of the three major urban centers of the Bay Area and either none (Union City) or only one (San Jose) of the region's major commercial airports. (Bay Area to Central Valley High-Speed Train, CEQA Findings of Fact and Statement of Overriding Considerations (adopted in Resolution 08-01, July 2008).)

Addition of an I-280 Alignment Alternative: Regarding the comment that the Authority should add an additional alternative that would traverse a route generally along the I-280 corridor from San Jose to San Francisco, the Authority preliminarily considered an I-280 alignment, but eliminated it from detailed study in the Program EIR/EIS. The reasons for eliminating an I-280 alignment were summarized in chapter 2 of the Draft and Final Program EIR/EIS documents. Appendix 2G of the Final Program EIR/EIS (as well as the Draft) describes the reasons for eliminating this alignment in more detail as follows:

- **I-280 Alignment Alternative (Exclusive Guideway)**: From San Francisco (Transbay Terminal or 4th and King Terminal Station), this alignment alternative would follow south along the I-280 freeway alignment to San Jose and be on an exclusive guideway in the I-280 corridor.

This exclusive guideway alignment would have major construction issues involving the construction of an aerial guideway adjacent to and above an active existing freeway facility while maintaining freeway traffic. Limited right-of-way in this corridor would require the extensive purchase of additional right-of-way and nearly exclusive use of an aerial structure between San Francisco and San Jose. The portion within the City and County of San Francisco is fully developed, and connecting the alignment alternative to Diridon Station in San Jose would require a guideway passing through developed portions of downtown San Jose. These areas would require considerable property acquisition.

The I-280 alignment alternative would require many sections of high-level structures to pass over existing overpasses and connector ramps (in particular at interchanges with Routes 17 (580), 85, and 92), resulting in high construction costs and constructability issues that would make this alignment alternative impracticable. This alignment alternative would also require relocating and maintaining freeway access and capacity during construction. The aerial portions would introduce a major new visual element along the I-280 corridor that would have visual impacts (intrusion/shade/shadow) on the residential portions, nature preserves, and scenic areas for this alignment alternative. In addition, the freeway has substandard features (e.g., medians and shoulders) in many places, and it is assumed that any room that might be available for HST facilities likely would be used by Caltrans to upgrade the freeway in these areas. The considerable earthwork and retaining walls needed through Palo Alto and Woodside would have potentially significant impacts to nature preserves. The I-280 corridor would not allow a convenient connection to San Francisco International Airport from the south—the alignment alternative would have to leave the freeway corridor and pass through Hillsborough and Burlingame to provide access to the airport. For these reasons, the I-280 corridor is not considered to be a practicable alternative for HST service between San Jose and San Francisco.

The Authority ultimately concurred in this rationale, finding that this alignment was properly eliminated. (Bay Area to Central Valley High-Speed Train, CEQA Findings of Fact and Statement of Overriding Considerations (adopted in Resolution 08-01, July 2008).)

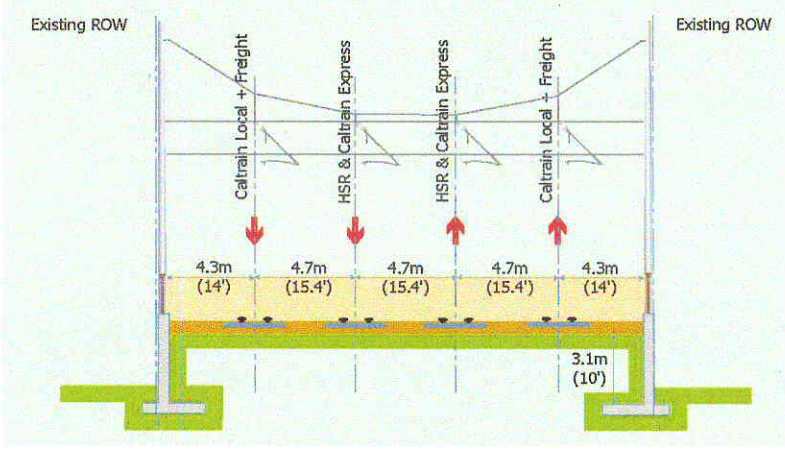
The Authority also notes that Caltrain is an established rail corridor serving population centers along the Peninsula, and this corridor offers the opportunity for complementary local, commuter, and statewide rail services to be fully integrated. The Caltrain JPB views the HST system as an opportunity to upgrade its services and improve this rail corridor.

Construct HST System Underground Along Entire Peninsula: The City suggests that constructing the entire system underground through the Peninsula would reduce impacts. A tunnel alternative for the entire Caltrain Corridor (50 miles) would be impracticable because it would have major construction issues and high capital costs associated with constructing a tunnel below an active existing transportation facility, while maintaining rail traffic on the surface. While Caltrain's electrification plans could be compatible with such a tunnel option, freight service would likely remain on the surface for two reasons: (1) the freight railroad would not necessarily convert to electric locomotives; and (2) the freight railroad would need access to shippers who are at-grade and adjacent to the Caltrain right-of-way. Since Caltrain and freight services share track, this option is infeasible. Additionally, the Authority determined that tunnels over 12 miles in length are impracticable, because of constructability and cost issues. For these reasons, the lengthy tunnel did not merit consideration in the Program EIR/EIS. As discussed below, however, one or more tunnels or trenches of shorter length will be considered during the project-level environmental process.

2. Grade Separation

The City's letter includes comments about the information on grade separations in the Draft Program EIR, the potential for grade separations to cause impacts, and potential mitigation for such impacts in the form of a trench. The Draft Program EIR/EIS included information on grade separations along the entire Caltrain Corridor and within Menlo Park in Appendices 2D and 2E. The analysis in the Draft and Final Program EIR documents concluded that grade separations along the Caltrain Corridor would not adversely impact local traffic circulation and could reduce noise impacts. The Project EIR/EIS will further study at a greater level of detail the benefits and potential impacts of grade separations on Menlo Park and neighboring cities.

The Authority acknowledges the City's concern that grade separation by raising tracks could create a "walled effect" that might divide the City. The conceptual plan/profiles in the Draft Program EIR/EIS show the alignment through Menlo Park as "retained fill." Retained fill does not, however, mean that the height of the fill will by definition be significant or create a "walled effect." In some locations in Menlo Park, at the conceptual level for the Program Level document the elevation of the rails is approximately 10-15 feet higher than the existing land and the right of way required would be approximately 75 feet (see cross section below).



The precise alignment and profile options for the HST system in the Caltrain Corridor will be further evaluated and refined as part of the preliminary engineering and project-level environmental review and could include trench and/or tunnel concepts. Available right-of-way, effect on adjacent communities and costs will be among key factors considered as part of this review. Subject to this further more detailed study, use of a trench through Atherton and Menlo Park or other portions of San Francisco to San Jose segment may be a cost-effective approach and will, therefore, be evaluated during the next phase of the HST project. The Authority is aware of the various design and construction techniques that can be applied for development of a trench.

3. Electrification

The Authority acknowledges the City's concerns about the visual appearance of the overhead catenary power supply for the trains. The Program EIR/EIS considered the visual effects of the HST system along the Caltrain Corridor in Chapter 3.9. At a conceptual level of detail, the

Program EIR/EIS process concluded that the poles and wires associated with the electrification would not pose a "significant" visual impact. The visual impacts were rated "low," because the poles and wires of electrification would reinforce the linear form of the railway corridor. Still, the EIR described, and the Authority adopted, a mitigation plan that will be considered in the project-level EIR/EIS as follows:

- Use neutral colors and dulled finishes that minimize reflectivity for catenary support structures, and design them to fit the context of the specific locale. (Final Program EIR/EIS, § 3.9.6; Bay Area to Central Valley High-Speed Train, CEQA Findings of Fact and Statement of Overriding Considerations (adopted in Resolution 08-01, July 2008).)

Further, the Authority is committed to working with local agencies and communities during subsequent project-level environmental review to develop systemwide design elements that draw from the best practices worldwide and work at the project-level of design and analysis to develop context-sensitive aesthetic designs and treatments for HST infrastructure (overcrossings, bridges, tunnel portals, soundwalls, walls and fencing, stations, support facilities, etc.).

A more detailed review of the visual impacts associated with proposed improvements (including electrification) along the Caltrain Corridor will be performed during the project-level environmental review. The mitigation described in the Program EIR/EIS and adopted by the Authority, and potentially additional strategies, will be considered during the project-level environmental review process.

The Authority recognizes that plans for Caltrain's electrification are well under way. Further progress of the Caltrain electrification project will be taken into account in future project-level environmental reviews for the HST project in this corridor. The assumption at the Program Level was that there would be one, compatible catenary system that would serve both Caltrain and the HST system. This assumption could be reexamined at the Project level analysis.

The Caltrain / Peninsula Corridor Joint Powers Board supports the use of the Caltrain Corridor for HST service. The Authority and Caltrain have signed a Memorandum of Understanding to establish, among other items, a complementary train service plan effectively serving the local, regional, and statewide markets. Such a plan would optimize service levels to meet such markets, as is done in the European and Japanese markets.

4. <u>Noise and Vibration Mitigation</u>

The City's letter states that noise and vibration impacts from the HST system must be clearly identified and addressed. The Draft and Final Program EIR/EIS documents analyzed the potential for noise and vibration impacts in section 3.4 at a conceptual level using relevant criteria adopted by the FRA (U.S. Department of Transportation 2005), FHWA (U.S. Department of Transportation 1998), and FTA (Federal Transit Administration 2006), each of which has established criteria for assessing noise impacts. For purposes of CEQA, the EIR/EIS concluded that impacts were significant over the long-term from introduction of a new transportation system, but also noted that the HST would be traveling at reduced speeds and the Caltrain Corridor communities would benefit from grade separation improvements for existing services and electrification of the railroad. The EIR described the potential for noise barriers such as

sound walls, trenches, or earthen berms to reduce noise impacts, and for track treatments to reduce vibration impacts.

A more detailed review of additional noise and vibration impacts associated with proposed improvements along the Caltrain Corridor will be performed during the project-level environmental review for the San Francisco to San Jose section. The mitigation strategies adopted by the Authority as part of the Program EIR/EIS process will be refined and applied as appropriate where noise impacts are found significant at the project level. The potential use of a trench for reducing noise impacts will be part of more detailed analysis.

While the program-level of analysis concluded that noise impacts on the Peninsula would be significant overall, a focused noise study in the Bay Area to Central Valley region (at Charleston Road in Palo Alto) showed the potential noise reduction benefits of eliminating horn blowing at a typical Caltrain grade crossing on the San Francisco Peninsula. Assessment of noise impacts from horns at grade crossings was performed with FRA's horn noise model and annoyance based criteria. The horn noise model indicated an 81% reduction in the number of people impacted within 0.25 mi (0.40 km) of that intersection by elimination of horn noise from commuter trains. Although the results vary depending on the local population density and proximity of residences and other sensitive land uses at each grade crossing, they illustrate the magnitude of the potential change to be expected if the sounding of horns and bells at existing rail crossings could be eliminated.

Removing all potential remaining horn noise would not necessarily eliminate HST noise impacts, however, because the sound of the trains would remain. The proposed HST would add its own noise to that of other trains using the railroad corridor. Carrying the focused study further, it was found that approximately 75% of the at-grade crossings to be eliminated with the proposed HST system are located adjacent to residential areas with a high potential noise impact rating. Thus, although there would be a clear benefit from the elimination of the horns and warning signals, there would be additional train noise and vibration primarily from the high train speed and frequency of service. In the project-level EIR/EIS, more detailed noise and vibration studies will determine whether the noise reductions associated with grade separations will reduce noise so significantly as to outweigh any increased noise from the new HST system.

5. Freight

The City expresses concern about the potential for increased freight as a result of the HST system creating grade separations along the Peninsula. The HST system along the Caltrain Corridor will share some trackage with Caltrain express commuter trains, but not with freight trains. The potential for freight traffic to increase along the Caltrain corridor is unclear. Freight rail services on the Peninsula are provided by Caltrain under a trackage right agreement. As mentioned above (Response to Comment number 3), the Authority and Caltrain are working together to develop a complementary train service plan. Caltrain will work with the freight services and others with regard to future freight activity on the corridor. The potential for freight service increase, if any, and the limits of that potential in the Caltrain corridor, will depend in part on the outcome of Caltrain's planning efforts. The study of possible freight service on the Dumbarton corridor was not within the scope of the program-level EIR/EIS for the HST system in the Bay Area to Central Valley. The Authority will examine the potential for increased freight service as part of the examination of cumulative impacts in the Project EIR.

6. Funding

The City asks for a detailed cost/benefit and fiscal impact analysis and suggests it should be provided to voters prior to the November 2008 election. The feasibility of the High Speed Rail System was established by the California High Speed Rail Commission in 1996 thus leading to legislative and gubernatorial creation of the Authority later that year. The High Speed Rail Authority affirmed the financial feasibility of the system when it adopted its Business Plan in 2000, and its revised Business Plan in November of 2008. These documents include cost/benefit analyses and fiscal assessments and they demonstrate there is a significant financial benefit to building the project. In addition to the Business Plans, regional economic studies were published in October of 2008. Those studies also described the economic benefits of the High Speed Train System. All of those reports are available on the California High Speed Rail Authority website (www.cahighspeedrail.ca.gov). For your convenience, we enclose copies of both the 2000 and 2008 Business Plans.

On November 4, 2008, the voters of California voters approved Proposition 1A, providing bond funds to support the construction of the initial phase of the HST system between San Francisco in Northern California and Los Angeles/Anaheim in Southern California, consistent with the Authority's selected alignments that were approved in its statewide program EIR/EIS in 2005, and its Bay Area to Central Valley program EIR/EIS in 2008. The Authority seeks to share the costs of constructing the HST system, including the first phase supported by Proposition 1A funds, but also substantial funding from the federal government and local and regional agencies. In addition, the Authority seeks public/private partnerships that will utilize private capital funding for certain aspects of the HST system.

7. Other Environmental Impacts

The Authority acknowledges the City's comments regarding the level of detail about impacts from the HST system. The Authority received many comments expressing concern about the level of detail in the program EIR/EIS and seeking a far greater level of detail in the impacts analysis. For this reason, the Authority prepared Standard Response 2 in Volume 3 of the Final Program EIR/EIS, which explains the nature of a program-level of analysis and how additional detailed analysis will be provided in future, tiered environmental impact reports. For your convenience, we enclose a copy of that standard response. Potential impacts to trees, visual impacts and traffic circulation issues will all be studied in detail during the Project EIR/EIS. See standard response number 2 enclosed herein.

Attachments

After litigation commenced, the Authority acknowledges receipt of the following documents attached to the City's September 25, 2007, letter:

A. City of Menlo Park comments and resolution on the first California High Speed Rail Program EIR/EIS dated August 26, 2004. (The Authority provided written responses to such letter as part of that document. The responses can be found as part of the Statewide Program EIR/EIS published in 2005. I enclose a copy of the response.)

B. City of Menlo Park comments on the Caltrain Electrification EIR/EIS dated May 24, 2004.

C. City of Menlo Park comments on the Dumbarton Rail Corridor Project dated July 23, 2007.

D. City of Menlo Park comments on the San Francisco Bay Area Regional Rail Plan dated August 29, 2007.

Additional Information

The Authority and its consultants met with the City of Menlo Park at its City Hall on January 7, 2009, to discuss the future environmental documentation process and invite attendance at the Scoping Meetings that were coming up at the end of January. At that meeting the Authority agreed to keep the City informed of material developments of the project and to check with the City regularly regarding the project. The Authority looks forward to working with the City on the project.