- High-speed trains will act as a catalyst for wider adoption of smart growth principles in communities near high-speed train stations, promoting infill development and transit-oriented development.

14 Will elements of the Peninsula Rail Program be studied in accordance with the California Environmental Quality Act (CEQA)?

Yes. The entire Peninsula Rail Program project will be fully compliant with CEQA and the National Environmental Protection Act (NEPA.)

15 If constructed, how will HSR affect the local economy?

Mobility, as evidenced by crowded airports and growing highway congestion, presents a growing challenge for California and its economic future, impacting residents and businesses alike. Projected population growth in the state and the region suggest that between now and 2050, this challenge will continue to intensify.

By 2030, high-speed rail will produce a sustained 1.1 percent increase in employment, or 48,000 new jobs in the Bay Area. During construction, the project will stimulate between $6.9 and $8 billion in spending within the region, mainly for tracks, stations and related infrastructure. This will directly and indirectly generate between 100,000 and 128,000 Bay Area jobs.

Today, Bay Area commuters lose approximately 150,000 hours of productivity each day to congestion, at an annual economic cost of approximately $2.6 billion. From an economic standpoint, reducing the time lost by commuters in Bay Area traffic will greatly increase business productivity.

16 How much will the project cost to construct and operate? How will it be paid for?

The most current estimated cost to build the 800-mile system is about $45 billion. Once built, the system will generate over $1 billion in annual profits.

The CHSRA is actively pursuing a multi-track financing strategy for the planning, design and construction phases of the project, including three tiers: state and local funding, federal funding and public-private partnerships.

State and Local Funding: $9.95 billion in voter-approved general obligation bonds (Proposition 1A)

Federal Funding: California's HSR project is expected to benefit greatly from $8 billion in funds approved as a part of the American Recovery and Reinvestment Act of 2009. In addition, the President included $5 billion over the next five years for investment in HSR and these programs are expected to receive considerable funding when Congress approves the next Surface Transportation Authorization Act.

Public-Private Partnerships Funding: The CHSRA's finance team anticipates that the commitment of state and federal dollars will attract private sector funding. The CHSRA's finance team has identified a broad array of public-private partnership opportunities.

17 What is the economic impact of NOT building HSR?

The most direct cost to Bay Area residents would be continuing operating losses for a Caltrain system that cannot achieve a sustainable economic model without electrification and modernization. Without taking advantage of the opportunities presented by HSR, Caltrain's existence is at risk.

Additionally, in 2000, more than a half-billion inter-regional trips were made in California. The California Department of Finance forecasts that by 2030, the state's population growth will cause total inter-regional travel to double to 1 billion trips per year, with automobiles keeping the lion's share, but with a nearly five-fold increase in conventional rail trips and an 80 percent increase in air travel.

High-speed trains will alleviate the need to build—at a cost of nearly $100 billion—about 3,000 miles of new freeway lanes plus five airport runways and 90 departure gates over the next two decades. A statewide high-speed train system—already subjected to environmental review—will meet that same need at about half the cost.

18 Does the construction of HSR on the Caltrain corridor require approval from Union Pacific Railroad (UPRR)?

Caltrain owns the entire right of way between San Francisco and Tamien station in San Jose. Under its trackage rights agreement with Caltrain, UPRR maintains the right to intercity rail along the Caltrain corridor, and is an important stakeholder involved with the implementation of HSR. Nothing having to do with the selection of the corridor or the environmental review of various design alternatives for HSR infringes on UPRR rights under this agreement.

The Peninsula Rail Program project team is involved in continuing discussions with UPRR regarding the implementation of HSR along the Caltrain corridor.

Caltrain®

For more information, or questions about the Peninsula Rail Program please visit www.caltrain.com or call the Project Information Line: 510-587-8640.

Caltrain® Peninsula Rail Program

Frequently Asked Questions

1 What is the Peninsula Rail Program? How qualified is the Peninsula Rail Program team in the area of High-Speed Rail (HSR)?

As specified in an agreement approved by both agencies, Peninsula Corridor Joint Powers Board (Caltrain) and the California High Speed Rail Authority (CHSRA) have formed the Peninsula Rail Program in order to coordinate and implement closely-related projects that will benefit both Caltrain and HSR. In effect, the agreement specifies that long planned projects, necessary to increase capacity and ensure the sustainability of the Caltrain commuter rail system, will be planned and implemented as a joint project along with the delivery of HSR between San Jose and San Francisco.

The agreement seeks to protect existing Caltrain operations during the construction of HSR, and specifies that concerns from affected communities and interested stakeholders will be considered through an expanded and comprehensive public participation process. The purpose of this effort is to maximize the opportunities to obtain community feedback and public input and to ensure the input from residents and stakeholders informs the Environmental Impact Report (EIR) and the overall design alternative selection process.

The Peninsula Rail Program team is composed of some of the world's most seasoned HSR experts. The Program Director from Caltrain is leading the design and construction of HSR on the Peninsula. He has more than 35 years of experience in the rail transportation industry and has held management positions for several international rail projects, including the Director of Systems Engineering for the Taipei Rapid Transit System, the Project Manager and Chief Negotiator for the Korean High-Speed Rail project, and Project Manager for Systemwide Works for the Channel Tunnel Rail Link Section One. Consultants working under contract were selected based upon their extensive experience in the design and implementation of high-speed train systems.

2 How will HSR be designed in my community? What factors will determine whether it is elevated, tunneled or built at all?

The horizontal and vertical alignments have not been selected. The project level EIR will determine how HSR will be designed and constructed along the Caltrain corridor. A variety of alignments will be investigated,, including at-grade, elevated and below-grade trench and/or tunnel concepts in sensitive areas, or where it is an appropriate and necessary design option. These alignments will go through a process of alternatives development and analysis that will include opportunities for the public and cities to comment on different alignment alternatives.

The precise alignment and profile options will be selected for study based on public input and feedback from key stakeholders along with the operational needs of the project. Alternatives will be further evaluated and refined as part of the project level EIR to determine whether they are physically constructible, and whether they are feasible given real world environmental, financial and other constraints.

Availability of right of way, impacts on adjacent communities and costs will be among the key factors considered as part of this review and every attempt will be made to contain the work within the current property owned by Caltrain.

3 How will Peninsula residents and other stakeholders be involved in the process? How will community input influence the project EIR and eventual selection of a design alternative?

The agreement between Caltrain and CHSRA ensures that public involvement will be an essential component of the EIR process. The Peninsula Rail Program's public participation process includes a variety of opportunities for Peninsula residents to become engaged in a community dialogue. These will include public access to technical information, numerous venues to discuss and consider various alternatives, use of a wide array of media for broad-based communications and an approach that encourages the development of consensus among a diverse set of stakeholders.

This approach will result in the careful study of environmental impacts, and potential mitigation of those impacts, for each alternative under consideration. The environmental topics to be studied include, but are not limited to:

- transportation
- air quality
- noise and vibration
- Electromagnetic Impulse/ Field
- public utilities and energy
- biological resources and wetlands
- hydrology and water resources
- geology
- soils and seismicity
- hazardous materials/wastes
- safety and security
- socio-economics
- communities and environmental justice
- local growth
- station planning and land use
- agricultural land, parks
- recreation and open space
- aesthetics and visual quality
- cultural resources
- cumulative impacts

Based on this information, the preferred alternative submitted to the CHSRA Board of Directors will be the result of a process that maximizes transparency, encourages broad-based public dialogue and utilizes community involvement to ensure that public input has helped to inform the ultimate decision.

4 How does HSR benefit the Caltrain commuter rail system?

Caltrain's future as a viable commuter rail system is dependent on funding associated with HSR. The Caltrain system is currently operating at full capacity during peak periods, and is experiencing rising costs and an ever- increasing deficit. Under these conditions, Caltrain will not be able to accommodate future regional population and employment growth, and Peninsula residents will no longer have access to a robust commuter rail system as viable alternative to automobile travel. Instead, future commuters will be forced to rely on modes of transportation that create increased traffic congestion and greenhouse gas emissions.

To address this, Caltrain worked extensively with local and regional stakeholders to develop a program that involves the construction of a system that would operate fully electrified passenger trains, and an improved signal system, allowing trains to operate more frequently, at more locations, and with significantly reduced travel times and operating costs. The capacity of the system will be dramatically increased, with improved safety enhancements, and an approximately 90% reduction in greenhouse gas emissions.

Voter approval of the State's first HSR system, and the subsequent creation of the Peninsula Rail Program, will ensure the realization of these critical improvements to the Caltrain system in conjunction with the implementation of HSR. In addition, Caltrain will benefit from the creation of a fully grade-separated right of way, allowing trains to operate more safely by eliminating at-grade traffic and pedestrian crossings.

5 Why does this process only consider the Caltrain corridor alignment? What about other alignment alternatives like Interstate 280, Highway 101 or the East Bay?

Several alternative alignments were considered and rejected in the Statewide Program EIR/EIS (2005) and those conclusions were restated in the Bay Area to Central Valley Program Level document that was approved by the CHSRA Board in July 2008. Alternative alignments including US-101, I-280 and the Altamont Pass were studied and found to be impracticable due to constructability issues, environmental impacts, and requirements for the acquisition of considerable property when compared to the Caltrain corridor alternative. The project level EIR/EIS will focus on the corridor that was chosen during the program level analysis.

6 In order to accommodate HSR, how many separate tracks are needed along the Caltrain corridor? Will HSR, Caltrain and freight rail all operate on the same tracks?

Caltrain and high-speed trains must be able to operate on the same tracks at the same time. While freight trains use the same type of tracks (standard gauge) as Caltrain and HSR, the Federal Rail Administration will not allow freight trains to operate at the same time of day as the high-speed trains and the electrified trains that Caltrain will run in the future.

The number of tracks required will be determined by the level of service. The current infrastructure, with a fully signaled and electrified system, will support up to 12 trains per hour per direction of combined Caltrain and HSR service. As the level of demand increases, certain locations will need to be expanded to three or possibly four tracks to support more frequent service levels, especially during peak travel times.

7 How much private property will need to be acquired in order to accommodate HSR?

Most sections of the corridor have enough room for up to a four-track configuration. The Peninsula Rail Program plans on avoiding or minimizing potential right of way acquisition and impacts throughout the Caltrain corridor. If any additional property is required, once the preferred project alternative details are determined—through the environmental process with transparency and public input, comment, and response—then discussions or negotiations would occur with appropriate property owners. If those discussions ultimately proved unsuccessful, then eminent domain proceedings could be initiated as a last resort, if necessary. The process would ensure that the property owner was properly compensated for the fair market value of the property.

8 Is it possible that HSR will not travel up the Peninsula and will instead connect to Caltrain and terminate in San Jose?

The EIR will study the option of not constructing HSR between San Jose and San Francisco. The impacts associated with this option will be considered and measured against other alternatives as a part of the environmental review process.

9 If an underground alternative is selected for HSR, how will that affect existing above-ground commuter and freight rail operations?

Various below-grade alternatives will be considered in the EIR. If the system is constructed in an underground tunnel, the width might exceed the current property line. A study of ground borne vibration, noise and soils analysis would need to be undertaken. If HSR is built in a trench, existing rail operations would be moved to a temporary track during construction and would need to move to a new permanent track upon completion.

Regardless of the below-grade solution, air quality regulations specify that diesel powered freight rail operations will need to continue operating in an environment with adequate ventilation.

If electrified Caltrain vehicles operate underground along with HSR, the project will need to include costs for construction of and access to underground platforms at Caltrain stations. If Caltrain remains at-grade, the project will need to include the cost of electrifying both Caltrain and HSR. In addition, Caltrain would not achieve the added safety benefits associated with the full grade separation of the system.

10 How will financial constraints affect the alternative selection process? Will the process include studies to determine whether creative economic solutions could enhance the feasibility of tunneling and other more expensive alternatives?

Financial feasibility will be one of the factors that will inform the alternatives selection process. The process will involve public and community involvement, which along with an operations plan, will determine what is desired; careful study of various alternatives to determine what is constructible; and a review of environmental, fiscal and other constraints to determine what is feasible.

One of the ways that public involvement will help foster a better project is the inclusion of opportunities for stakeholders to provide input on a variety of different issues including financial feasibility and funding scenarios. It's likely that project cost will vary substantially among different alternatives. For a more expensive alternative to prevail, the solution must solve more problems than it creates and it must be fundable.

11 How will property values be affected by the implementation of HSR on the Peninsula?

With significant commuter and freight rail currently operating along the corridor, many of the impacts associated with HSR already exist today. All potential impacts associated with each alternative will be studied as a part of environmental review and, beyond the identification of potential costs and benefits, it will be the responsibility of the CHSRA to develop mitigation strategies to avoid or minimize significant adverse environmental effects. These strategies will help address any issues that may negatively impact local property values.

In addition, it can be expected that many properties will experience an increase in value associated with expanded economic development opportunities resulting from the creation of a modernized rail system that offers unprecedented regional and statewide mobility options.

12 How many HSR trains will travel on the Peninsula corridor and how will construction and operations affect Peninsula communities?

CHSRA's 2008 Business Plan shows, on average, that 9 to 10 trains per hour per direction would operate on the corridor during peak periods by 2030. The top operating speed on the corridor is expected to be 125 mph and the train and the tracks will be completely grade-separated from existing roadways. These service levels and speeds will be revisited as part of the ongoing project level EIR.

Potential impacts on surrounding communities associated with the construction and operation of the system, including noise, vibration, dust, traffic circulation and others, will be studied as a part of the project level EIR and will vary significantly among the several design alternatives to be considered. It is possible that communities could see improved noise and vibration impacts resulting from grade separation and the operation of electrified equipment when compared to the current diesel system. Beyond the identification of potential costs and benefits, it will also be the responsibility of the CHSRA to develop mitigation strategies to avoid or minimize significant adverse environmental effects.

The draft and final program EIR/EIS documents analyzed the potential for noise and vibration impacts at a conceptual level and noted that the Caltrain corridor communities would benefit from grade separation improvements for existing services and electrification of the railroad. These improvements will reduce train noise and eliminate the need for horn signals at grade crossings, resulting in an 81 percent reduction in the number of people impacted within a quarter mile. The EIR/EIS described the potential for various noise barriers to effectively reduce noise impacts, and for track treatments to effectively reduce vibration impacts.

A more detailed review of noise and vibration impacts associated with proposed improvements along the Caltrain corridor will be performed during the project level EIR to determine whether the noise reductions associated with grade separations will reduce noise so significantly as to outweigh any increased noise from the new HSR system.

13 What are the positive environmental impacts?

The development of the high-speed train system is one of many strategies that will reduce global warming and help control our resource consumption to preserve the earth for future generations. Recent environmental analyses and studies comparing California's proposed high-speed train system against building more highways and airports to meet projected travel demands found that the system would have the following benefits by 2030:

- High-speed trains will have less impact on the environment than expanding airports and highways, less potential impact on wetlands and water resources, biology and farmlands; and less noise impact.
- High-speed trains need only one-third of the energy per passenger than that of an airplane and one-fifth of an automobile trip.
- The system is projected to save 12.7 million barrels of oil per year by 2030, even with future improvements in auto fuel efficiency.
- Electrically powered high-speed trains reduce pollutant and greenhouse gas emissions and reliance on fossil fuels. The total predicted emissions savings of the California high-speed train system is up to 12 billion pounds of CO2 per year by 2030 and would grow with higher ridership. The system will avoid and/or minimize the potential impacts to cultural, park, recreational and wildlife refuges to the greatest extent possible.
- The system will decrease air pollutants statewide and in all air basins analyzed by reducing pollution generated by automobile internal combustion engines.
- The system will maximize the use of existing transportation corridors and railroad rights of way in order to minimize the impacts on California's treasured landscape.