



CITY OF LODI  
COUNCIL COMMUNICATION

AGENDA TITLE: Approve Comments on High Speed Rail Environmental Impact Report  
MEETING DATE: August 18, 2004  
PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council approve comments on the High Speed Rail Environmental Impact Report on the proposed California High-Speed Train System.

BACKGROUND INFORMATION: The California High Speed Rail Authority has issued a draft Environmental Impact Report (EIR) on the proposed California High-Speed Train System. Through a series of studies and earlier decisions, the proposed Sacramento/Bakersfield segment will be routed along the east side of Lodi, along the Central California Traction Company alignment. The EIR includes alternative alignments north and south of Lodi (Exhibits A and B).

Exhibit C is a copy of the Authority's Highlights of the Draft EIR which promotes the project and generally describes major impacts. Exhibit D presents a brief comparison of the two proposed routes.

This project has the potential to significantly impact the north San Joaquin County area in the form of road closures, noise and various property impacts. These are described in the numerous volumes of documents available on the Authority's website: [www.cahighspeedrail.ca.gov](http://www.cahighspeedrail.ca.gov). The Public Works Department also has a copy of the documents on CD-ROM; we can provide copies upon request.

This facility has some characteristics that perhaps are not well known (see Exhibit E):

- Although the right-of-way width may be as little as 50 feet, it will be entirely fenced and separated from adjacent property. This means there will be no at-grade road crossings except in certain areas where train speeds will be reduced, such as near the stations. Given the high cost of elevating the tracks or building over/under passes, there will be considerable pressure to close local roads where they cross the facility.
- The high-speed trains can not run next to existing railroad tracks due to Federal Railroad Administration requirements. The planning work has focused on running alongside existing rail corridors to minimize impacts, but the facility will still need to acquire land and be built outside the existing rail line.

Another issue that Council may wish to comment on is the Central Valley to Bay Area alignment. Of the three options being consider earlier, the Authority has already eliminated the Altamont corridor, leaving two southern options, one along the Highway 152/Pacheco Pass corridor, the other slightly north (see Exhibit F).

Comments on the EIR are due August 31, 2004.

Staff recommends that the City comment that specific road closures and grade separations are not identified in the EIR, and the associated impacts are not discussed.

FUNDING: Not applicable.

*Richard C. Prima, Jr.*  
for Richard C. Prima, Jr.  
Public Works Director

RCP/pmf  
Attachments  
cc: Rad Bartlam, Community Development Director

APPROVED: *Janet S. Keeter*  
Janet S. Keeter, Interim City Manager



*Exhibit B*



Note – High Speed Rail Detail preliminary alignment; line width is not to scale.

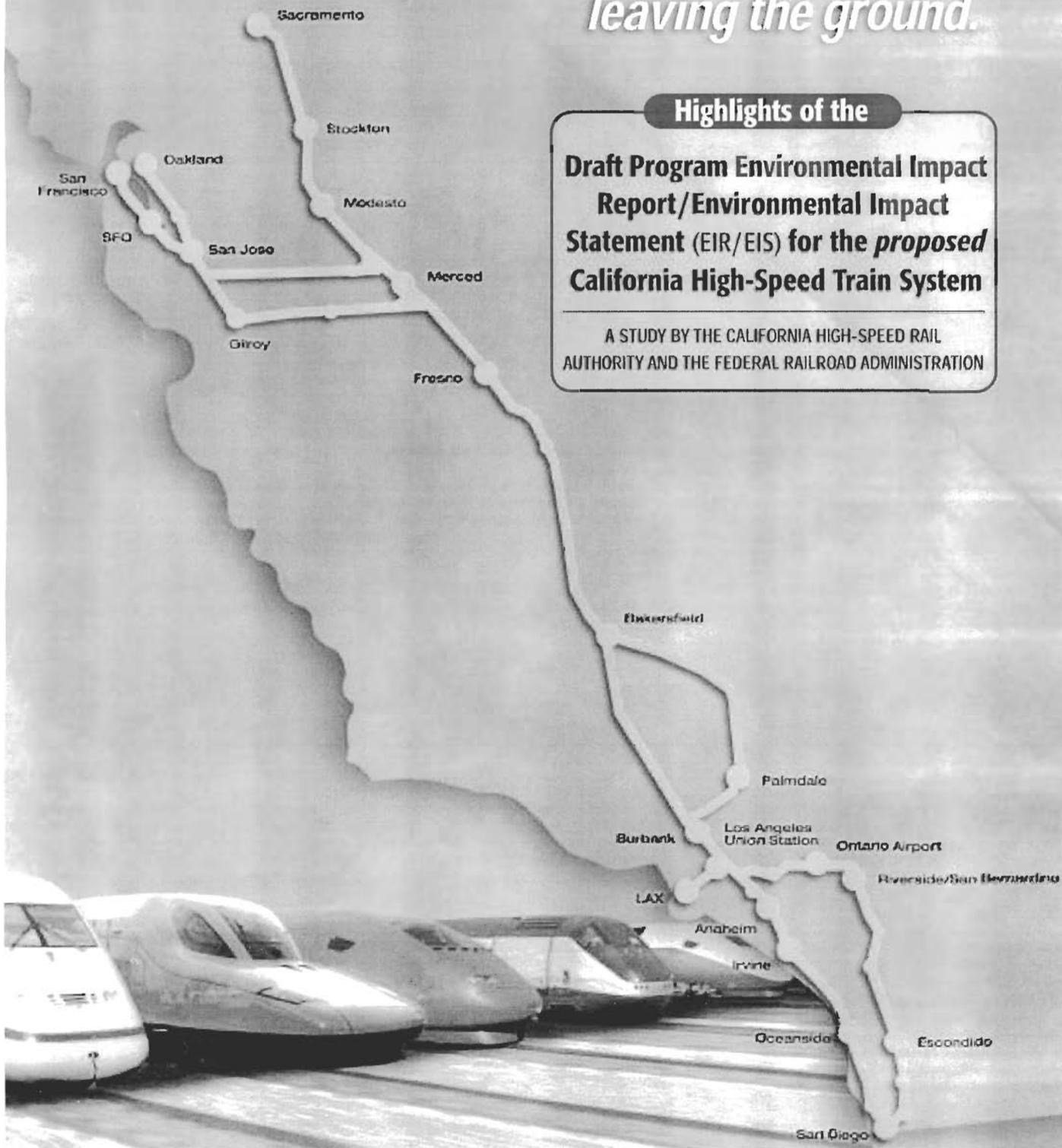
# A plan to Fly California

*...without ever  
leaving the ground.*

## Highlights of the

**Draft Program Environmental Impact  
Report/Environmental Impact  
Statement (EIR/EIS) for the *proposed*  
California High-Speed Train System**

A STUDY BY THE CALIFORNIA HIGH-SPEED RAIL  
AUTHORITY AND THE FEDERAL RAILROAD ADMINISTRATION



# How will you travel from Southern California to the Bay Area in 2020?

*High-speed trains could be in your future*

## Californians will face a massive challenge by the year 2020:

Up to 98 million more intercity\* trips – and 11 million more people will mean a greater demand on the state’s infrastructure, resulting in more traffic congestion, reduced safety, more air pollution, longer travel times, less reliability and less predictability in intercity travel.

The California High-Speed Rail Authority (Authority) and the Federal Railroad Administration (FRA) have undertaken an environmental study to assess a proposed high-speed train system and other options for meeting future intercity travel demands. Alternatives for intercity travel were evaluated, generally from Sacramento and the San Francisco Bay Area, through the Central Valley, to Los Angeles and San Diego.

### The alternatives for serving existing and future intercity trips...

- No Project – reliance on the state’s existing transportation systems
- Modal Development – improvements to existing highway and air travel networks
- High-Speed Trains – a new statewide train system, at least 700 miles in length, capable of travel at speeds up to 220 mph

### Based on the Draft Program EIR/EIS, high-speed trains

- Would be two-to-three times less costly than expanding highways and airports to serve similar travel demands
- Would improve intercity transportation reliability
- Are projected to carry as many as 68 million passengers annually by 2020 – with the capacity to carry about twice that many passengers
- Would be the most energy efficient of the alternatives
- Would have quick travel times
- Would provide low passenger costs per mile
- Would be safer and more reliable than highway and air travel

### High-speed trains could

- Offer a new choice in intercity travel
- Connect to existing airports and transit terminals along high-speed train corridors
- Ease the growing demand on existing highways and airports through 2020 and beyond

\* "Intercity" means region-to-region trips, not including daily commute trips

Oakland  
 Union City  
 Fremont  
 Gilroy  
 Los Banos  
 Sacramento  
 Modesto  
 Merced  
 Fresno  
 Tuare County  
 Kings County  
 Bakersfield  
 Hanford  
 Salinas  
 Burbank  
 Los Angeles  
 LAX  
 Norwalk  
 Anaheim  
 Orange  
 San Gabriel Valley  
 Ontario Airport  
 Riverside  
 San Bernardino  
 Temecula  
 Escondido  
 Mira Mesa  
 University City  
 San Diego

# No Project Alternative

## The state's existing transportation systems with planned improvements

**This alternative** consists of the state's intercity transportation system (highway, air and conventional rail) as it existed in 1999-2000, and as it would be in 2020 with the addition of transportation projects currently programmed for implementation (already in funded programs/financially constrained plans), including:

- State Transportation Improvement Program
- Regional Transportation Plans for highways and public transit
- Airport improvement plans
- Intercity passenger rail plans

### Study Results

**Would not meet intercity travel needs projected for 2020 as population continues to grow**

- Highway capacity would be insufficient to accommodate projected intercity travel growth in the regions that would be served by the proposed high-speed train system
- Many of the state's airports already are at or near capacity and could become severely congested under this alternative
- Highway congestion and airport delays would continue to increase, hindering the economy and eroding California's quality of life

**Would contribute to environmental degradation**

- There would be negative impacts on traffic: increased congestion, decreased mobility and reduced reliability and safety
- Degradation of air quality and increased energy demand

**Total "door-to-door" travel time from Los Angeles to San Francisco**

- Highway travel time would increase by one hour in 2020
- Air travel time would increase by 30 minutes in 2020
- Existing conventional rail travel time 10:05 (requires two bus transfers)

### ESTIMATED TOTAL TRAVEL TIMES "DOOR-TO-DOOR" BETWEEN CITIES BY AUTO, AIR AND HIGH-SPEED TRAIN IN 2020

CITY PAIRS DOWNTOWN TO DOWNTOWN	AUTO	AIR		HIGH-SPEED TRAIN	
	NO PROJECT ALTERNATIVE	NO PROJECT ALTERNATIVE	NO PROJECT ALTERNATIVE	ALTERNATIVE OPTIMAL EXPRESS TIMES	
	TOTAL	LINE HAUL*	TOTAL	LINE HAUL*	TOTAL
LOS ANGELES TO SAN FRANCISCO	7:57	1:20	3:32	2:25	3:20
LOS ANGELES TO FRESNO	4:30	1:05	3:02	1:12	2:23
LOS ANGELES TO SAN DIEGO	2:49	0:48	3:00	1:13	2:16
LOS ANGELES TO SAN JOSE	6:50	1:00	3:14	1:49	2:52
SACRAMENTO TO SAN JOSE	2:40	NO SERVICE	NO SERVICE	0:50	1:53

\*ACTUAL TIME IN PLANE OR TRAIN



## Modal Alternative

### *Additional improvements to existing highway and air travel systems*

**This alternative** consists of potentially feasible improvements to existing highways and airports sufficient to serve at least 68 million person trips annually. While these improvements are not proposed or recommended, they represent theoretically feasible options and include:

- 2,970 additional lane-miles on intercity highways statewide, which would include at least two and sometimes four additional highway lanes along selected intercity highways
- Nearly 60 new gates and five new runways statewide – equivalent to two new Ontario International Airports
- No increased transportation choices or improved connectivity
- Little or no sustainable capacity beyond the 68 million trips

### Study Results

#### **Would help to meet the need for intercity travel into the future, but with significant disadvantages**

- Would be less safe and less reliable than the proposed high-speed train alternative
- Congestion would still increase on highways and at airports compared to existing conditions as well as congestion and travel delays on streets and highways leading to and from airports
- Highway and air transportation improvements would result in reduced travel times and congestion as compared to the No Project Alternative
- As compared to the No Project Alternative, employment would be expected to increase by 250,000 and urbanized area by 65,000 acres between 2002 and 2035
- Would cost \$82 billion (2003 dollars) – more than two times more expensive than the high-speed train alternative

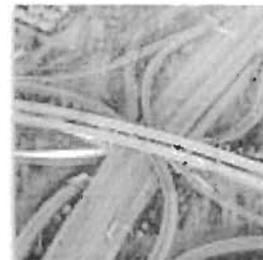
#### **Would have the potential for significant negative environmental impacts**

- Increased energy use and dependence on petroleum
- Increased emissions of air pollutants
- Impacts on property and land uses
- Increased suburban sprawl
- Impacts to wetlands and biological resources
- Effects on cultural resources, such as historic sites
- Impacts on water quality
- Impacts on park lands



#### **Total "door-to-door" travel time from Los Angeles to San Francisco**

- Highway travel time would increase from the existing 6:57 in 2000 to 7:16 in 2020
- Air travel time would increase from the existing 3:20 in 2000 to 3:27 in 2020



# High-Speed Train Alternative

*A new statewide transportation network capable of traveling at 220 mph connecting California's major metropolitan areas*

**This alternative** consists of a new high-speed train system approximately 700 miles long that would deliver predictable, consistent and competitive intercity travel.

- State-of-the-art electrically powered high-speed steel-wheel-on-steel-rail technology with automatic train control
- Up to 68 million passengers a year by 2020
- Exclusive tracks for most of the system, fully grade-separated, either in an open trench or tunnel, at-grade, or on an elevated guideway, depending on terrain and physical constraints
- Most alignments within or adjacent to existing rail or highway right-of-way
- New and upgraded stations, with connections to major airports

## Study Results



### Would help to meet the need for intercity travel into the future

- Safer, more reliable than highway or air travel
- A new mode of transportation that would increase connectivity and accessibility to existing transit systems and airports
- Quick, predictable, consistent travel times that would be sustainable over time
- Improved travel options in parts of the state with limited bus, rail and air transportation service
- Employment opportunities expected to increase by 450,000 over the No Project Alternative; however, urbanization decreases by 2,600 acres compared to the No Project Alternative between 2002 and 2035
- Congestion would still increase on highways and at airports as compared to existing conditions
- Reduction of total travel times for all transportation modes as a result of traffic diversion to high-speed trains
- Cost to construct the entire system – \$33 to \$37 billion (2003 dollars)
- Passenger cost lower than auto or air travel for the same intercity markets
- Diverting trips to high-speed trains would reduce congestion on highways and for air travel

### Would have the potential for significant negative environmental impacts

- Impacts on property and land uses
- Impacts to wetlands and biological resources
- Impacts to cultural resources, such as historic sites
- Noise and vibration impacts
- Impacts to farmlands
- Impacts to park land and water quality

### Would provide environmental benefits compared with the No Project and Modal Alternatives

- Decreased energy consumption
- Reduced air pollutant emissions and improved air quality
- Would use less land than would be needed to expand existing highways and airports
- Would provide opportunities to plan for transit-oriented growth to meet future demands
- Fewer environmental impacts overall on sensitive habitats and water resources (floodplains, streams and wetlands) than the Modal Alternative
- For longer distance intercity travel, high-speed trains would provide "door-to-door" travel times comparable to air transportation and less than one-half as long as highway travel times
- For intermediate intercity markets such as Fresno to Los Angeles, high-speed trains would provide considerably quicker "door-to-door" travel times than either air or highway transportation options
- Would provide additional capacity for future generations

### Total "door-to-door" travel time from Los Angeles to San Francisco

- Highway travel time would increase from the existing 6:57 in 2000 to 7:36 in 2020
- Air travel time would increase from the existing 3:02 in 2000 to 3:26 in 2020
- High-speed train travel time would be 3:20 in 2020

## EIR/EIS Prepares Way For Meeting California's Transportation Needs

*220 mph train system would link major California cities*

**The California High-Speed Rail Authority** (the Authority) has proposed high-speed train service for intercity travel in California between the major metropolitan centers of the San Francisco Bay Area and Sacramento in the north, through the Central Valley, to Los Angeles and San Diego in the south. The proposed high-speed train system is projected to carry as many as 68 million passengers annually by the year 2020.

The Authority adopted a Final Business Plan in June 2000, for an economically viable high-speed train system capable of speeds in excess of 200 miles per hour on a mostly dedicated, fully grade-separated track with state-of-the-art safety, signaling and automated train control systems.

To comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), a Draft Program EIR/EIS has been prepared. The Authority is both the project sponsor and the lead agency for purposes of the state CEQA requirements. The Federal Railroad Administration (FRA) is the federal lead agency for compliance under NEPA.

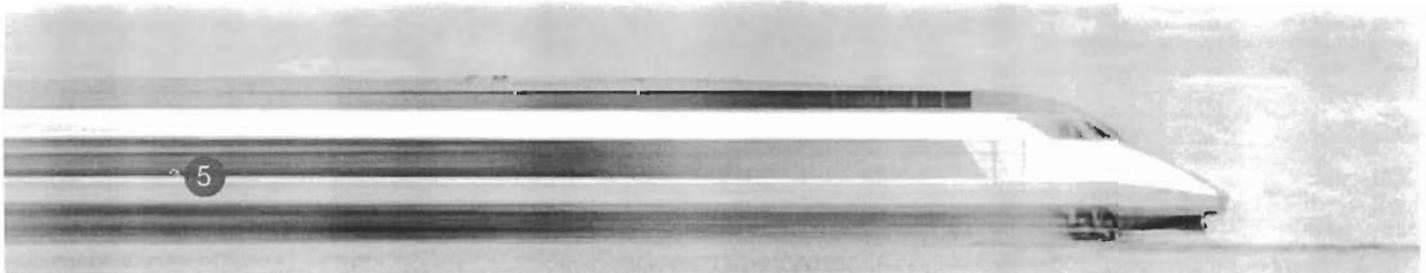
Preparation of the Draft Program EIR/EIS by the Authority and the FRA has involved more than 30 months of identification, planning, review and evaluation of alternatives. Seventeen public scoping meetings, plus numerous briefings and presentations to large and small groups, were conducted during the preparation of the Draft Program EIR/EIS.

The Draft Program EIR/EIS document includes:

- A full description of the alternatives
- Evaluation of potential environmental impacts for each alternative
- Identification of general mitigation strategies for the proposed high-speed train alternative
- Discussion of potential high-speed train alignment and station location options

### **The Draft Program EIR/EIS identifies high-speed trains as the preferred alternative that could shape California's intercity transportation future:**

- A completely new and separate intercity transportation alternative to augment existing air, highway and conventional rail travel
- Quick travel times
- Better for the environment than only expanding highways and airports
- Proven, 22-year safety record in Europe and Japan
- Capable of carrying 68 million passengers a year by 2020
- Low passenger travel cost per mile



# California's New High-Speed Train

*Bringing California closer together*

The Draft Program EIR/EIS considers several potential alignment and station location options

## Alignment options include:

### Northern Mountain Crossing

Through the Pacheco Pass (SR152), or a Diablo Range northern crossing more directly aligned with San Jose.

### Southern Mountain Crossing

Through the Tehachapi Mountain Range between Los Angeles and Bakersfield via the I-5 corridor or a crossing through Palmdale and the Antelope Valley.

### Bay Area

Service options to the Bay Area along the Peninsula to San Francisco and/or the East Bay to Oakland.

### Central Valley

Service along or near the Highway 99 corridor from Bakersfield to Sacramento and the Bay Area.

### Service to San Diego (Inland)

Through the Inland Empire via the I-215/I-15 corridor to either downtown San Diego or Qualcomm Stadium.

### Service to San Diego (Coast)

Transfer to LOSSAN rail corridor in Los Angeles or direct service to Orange County with a transfer in either Anaheim or Irvine for service to San Diego on Surfliner trains using an improved LOSSAN rail corridor.

### Shared Use and Intermodal Connections

Service to the urban centers on shared tracks with other passenger rail services at moderate speeds in heavily urbanized areas (i.e., San Jose to San Francisco and Los Angeles to Orange County).

Potential direct link to Los Angeles International Airport (LAX).

Potential station connections to San Francisco International Airport, Oakland Metropolitan International Airport, Norman Y. Mineta San Jose International Airport, Burbank-Glendale-Pasadena Airport, Ontario International Airport and San Diego International-Lindbergh Field.

Potential station connections at major transit hubs in California's metropolitan areas.



# Next Steps in the Environmental Process for the Proposed High-Speed Train System

- Public release and 90-day review of the Draft Program EIR/EIS
- Hearings held in affected regions
- Public submits comments on Draft Program EIR/EIS at hearings or in writing
- The Authority and FRA prepare Final Program EIR/EIS that may identify preferred alignment and station options and includes responses to comments
- Determine whether to advance high-speed train system to next phase – Project Development and Project Environmental Analysis Phase

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**Check out the California High-Speed Rail Authority's Web site**  
for the Draft Program EIR/EIS and related technical reports.  
[www.cahighspeedrail.ca.gov](http://www.cahighspeedrail.ca.gov)

**List of cities where libraries will have document available:**

Anaheim	Gilroy	Norwalk	Riverside	San Jose
Bakersfield	Irvine	Oakland	Sacramento	Santa Clarita
Burbank	Los Angeles	Oceanside	San Clemente	Stockton
Escondido	Merced	Ontario	San Diego	Sylmar
Fremont	Modesto	Palmdale	San Francisco	Temecula
Fresno	Mountain View	Palo Alto	San Gabriel	Tulare

**The Draft Program EIR/EIS is available** for viewing in libraries  
and can be obtained on CD by contacting the  
**California High-Speed Rail Authority**  
at **(916) 322-1419**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY



U.S. Department  
of Transportation  
Federal Railroad  
Administration

**6.3 SACRAMENTO TO BAKERSFIELD REGION**

This region of central California includes a large portion of the Central Valley (San Joaquin Valley) from Sacramento south to Bakersfield.

**6.3.1 Sacramento to Bakersfield Alignment Options**

A. SACRAMENTO TO STOCKTON ALIGNMENT OPTIONS

All information presented is for the area from Sacramento to Stockton. This segment is shown in Figure 6.3-1.

<b>Union Pacific Railroad (UPRR) (Downtown Sacramento to Downtown Stockton)</b>		<b>Central California Traction (CCT) (Downtown Sacramento to Downtown Stockton)</b>
<b>Physical/Operational Characteristics</b>		
<b>Alignment Description</b>	The UPRR alignment begins at the Sacramento Rail Depot in downtown Sacramento. North of Lodi, the alignment diverges from UPRR to the CCT to bypass Lodi and reconnects to the UPRR to serve the proposed downtown Stockton station site. This alignment option includes a new alignment bypass of Stockton for express services. Station options considered in this segment include Sacramento Downtown station, Power Inn Road station and Stockton ACE Downtown.	The CCT alignment begins at the Sacramento Rail Depot in downtown Sacramento, using the UPRR alignment until transitioning to CCT near the potential Power Inn Road station site. The CCT alignment reconnects to UPRR to serve the proposed downtown Stockton station site. This alignment option includes a new alignment bypass of Stockton for express services. Station options considered in this segment include Sacramento Downtown station Power Inn Road station and Stockton ACE Downtown.
<b>Length in miles (km)</b>	49 mi (79 km)	50 mi (80 km)
<b>Cost<sup>26</sup> (dollars)</b>	\$2.49 billion	\$2.64 billion
<b>Travel Time (min)</b>	20 min	21 min
<b>Ridership</b>	The UPRR is a more direct route with slightly shorter travel times (1 min less). The UPRR and CCT rail alignments would serve the same basic populations and the same number of potential stations.	The CCT and UPRR rail alignments would serve the same basic populations and the same number of potential stations.
<b>Constructability</b>	The UPRR traverses more urban area than the CCT; however, HST would share freight right-of-way through Sacramento.	The transition from CCT at the Power Inn Road potential station site to the UPRR alignment to reach downtown Sacramento would include 2 mi (3 km) of property acquisition takes in urban Sacramento.

<sup>26</sup> Segment cost and length includes 3.8 mi south of Stockton ACE Downtown station (Little John Creek).

	<b>Union Pacific Railroad (UPRR) (Downtown Sacramento to Downtown Stockton)</b>	<b>Central California Traction (CCT) (Downtown Sacramento to Downtown Stockton)</b>
<b>Land Use and Planning, Communities and Neighborhoods, Property, and Environmental Justice</b>	<p>Compatibility: High potential impacts</p> <p>Environmental Justice: Low potential minority population impacts</p> <p>Community: Low potential impacts</p> <p>Property: Low potential impacts</p> <p>Although compatibility is considered low, the proposed alignment would be on or adjacent to the existing rail corridor. All station sites are located in areas where minority populations have been identified. Although stations would create potential impacts, they would also produce community access benefits. The Sacramento Valley and Stockton Downtown stations sites are at existing rail hub stations.</p>	<p>Compatibility: High potential impacts</p> <p>Environmental Justice: Low potential minority population impacts</p> <p>Community: Low potential impacts</p> <p>Property: Low potential impacts</p> <p>The CCT has slightly more land designated for residential and agricultural use than the UPRR route, which would make it potentially less compatible with future land uses. The CCT alignment traverses primarily rural lands, resulting in low potential property impacts. However, there are some small segments with high potential impacts, particularly in Sacramento if the downtown station (UPRR connection) is selected.</p>
<b>Farmlands:</b> <sup>28</sup> Ac (ha) of farmland (depending on specific configuration with loops and connections)	<p>Farmlands: 588–599 ac (238–242 ha)</p> <p>Existing UPRR rail alignment reduces potential impacts on farmlands between Sacramento and Lodi. Connection to CCT north of Lodi and express loop to the east of Stockton would require new alignments through farmlands, which could have potential severance impacts.</p>	<p>Farmlands: 449–460 ac (182–186 ha)</p> <p>Existing UP Existing CCT rail alignment reduces potential impacts on farmlands between Sacramento and Stockton. The express loop to the east of Stockton would require new alignments through farmlands, which could have potential severance impacts.</p>
<b>Cultural Resources and Paleontological Resources:</b> <sup>29</sup> Potential presence of historical resources in area of potential effect	<p>Known cultural resources: 39–49</p> <p>Potential for historical resources through downtown Sacramento and Stockton. However, the alignments through both cities would use existing rail right-of-way.</p>	<p>Known cultural resources: 44–54</p> <p>Potential for historical resources through downtown Sacramento and Stockton. However, through both cities, the alignments would use existing rail right-of-way. The CCT traverses fewer urban areas.</p>

<sup>28</sup> The farmland resources study area is defined as 50 ft (15 m) on each side of alignment centerline (100 ft [30 m] total) when the alignment is separate from an existing rail corridor. When the alignment is adjacent to an existing rail corridor, the study area would extend 100 ft (30 m) from the rail right-of-way on the side the alignment would run.

<sup>29</sup> The archaeological area of potential effect is defined as 500 ft (152 m) on each side of the alignment centerline for new routes requiring additional right-of-way, and 100 ft (30 m) on each side of centerline for routes along existing highways and railroads, where very little additional right-of-way would be required. The study area for paleontological resources is defined as 100 ft (30 m) on each side of alignment centerline.

## 1.2 High-Speed Trains for California

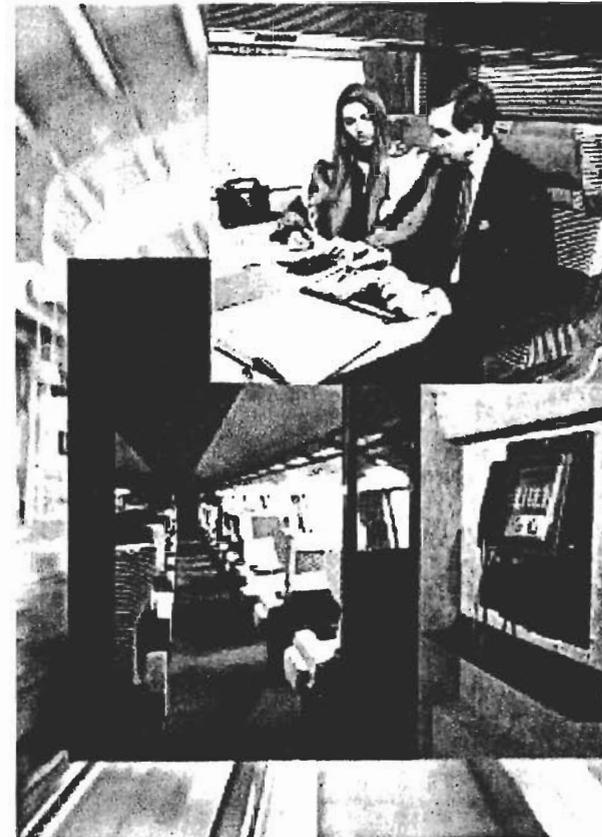
The decision to choose a particular type of high-speed technology for California should be deferred until after the environmental clearance phase of this project. Manufacturers of steel-wheel-on-steel-rail and Maglev technologies should be able to compete for the opportunity to use their technology in California, ensuring the best product for the best price.

Regardless of technology, high-speed trains will offer Californians a new way of traveling. Combining the benefits of moving from one part of the state to another quickly with the freedom to plug in your computer or talk on a cell phone or get up to get a cup of coffee, high-speed train travel promises Californians a relaxing, productive trip. Tables would be available for group seating, with conference rooms available for business meetings en route. Because they travel over new dedicated infrastructure, trains traveling at high speeds provide an extremely safe, smooth and comfortable ride — seat belts are never needed. And high-speed trains are the most reliable way to travel, not hampered by rain, fog or interstate freeway delays in completing their scheduled runs.

### Design Standards for California

In this business plan, high-speed trains are defined as those capable of exceeding 200 miles per hour. However, these trains will not operate at those speeds everywhere in the state. Within the state's urban regions, high-speed trains will likely only travel at maximum speeds between 100 and 150 miles per hour. For purposes of this business plan, all other trains — equipment, service, and trackage — will be known as "conventional rail."

The high-speed infrastructure will be a state-of-the-art, proven, world-class technology that significantly increases the state's transportation capacity. The system will use electric propulsion on a double track or guideway to provide the necessary high capacity, flexibility, and reliability. The system will be completely grade separated, with no potential for conflict with pedestrian or vehicular traffic. In addition, the high-speed train right-of-way will be completely fenced and monitored to avoid intrusion by pedestrians, wildlife or livestock. Using modern signaling technology, trains on similar infrastructure in Asia and Europe can operate at three-minute intervals.



**Combining the benefits of moving from one part of the state to another quickly with the freedom to plug in your computer or talk on a cell phone or get up to get a cup of coffee, high-speed train travel promises Californians a relaxing, productive trip.**

In general, the high-speed train system will be built at-grade and require a corridor 50 feet wide (see Figure 1.1). In severely constrained urban areas, where grade separation costs are prohibitive, aerial structures (Figure 1.2) or retained fill are assumed. By comparison, a 12-lane freeway constructed to Caltrans' standards requires a nearly 225-foot-wide right-of-way.

All intermediate stations will feature siding tracks to allow express trains to pass through without slowing down. High-level boarding platforms will facilitate passenger loading and unloading as well as meet requirements for disabled passengers under the Americans with Disabilities Act. Each station will be a transportation hub connecting the high-speed train system to highways, conventional rail, transit, and/or air transportation networks, as appropriate.

The ridership and revenue estimates in this plan have assumed 10-car trains capable of seating 650 passengers, and that by 2020, the system will need to operate trains about every 15 minutes during peak periods. To put the total available capacity of this system into perspective, consider that the signaling

system would permit trains to run every three minutes, and additional passenger cars could be added to the trainsets. Two trainsets could even be linked — effectively doubling their capacity. Trains carrying 650 passengers every three minutes in both directions could serve up to 26,000 passengers per hour — equivalent to the number of passengers currently moved on a 12-lane urban freeway during peak periods. The Authority's projections suggest that even by 2050, the high-speed system would be carrying less than 50 percent of its ultimate potential capacity. The high-speed train infrastructure would provide capacity to serve California's growing transportation and mobility needs to move intercity passengers, commuters, and goods throughout the 22nd century.

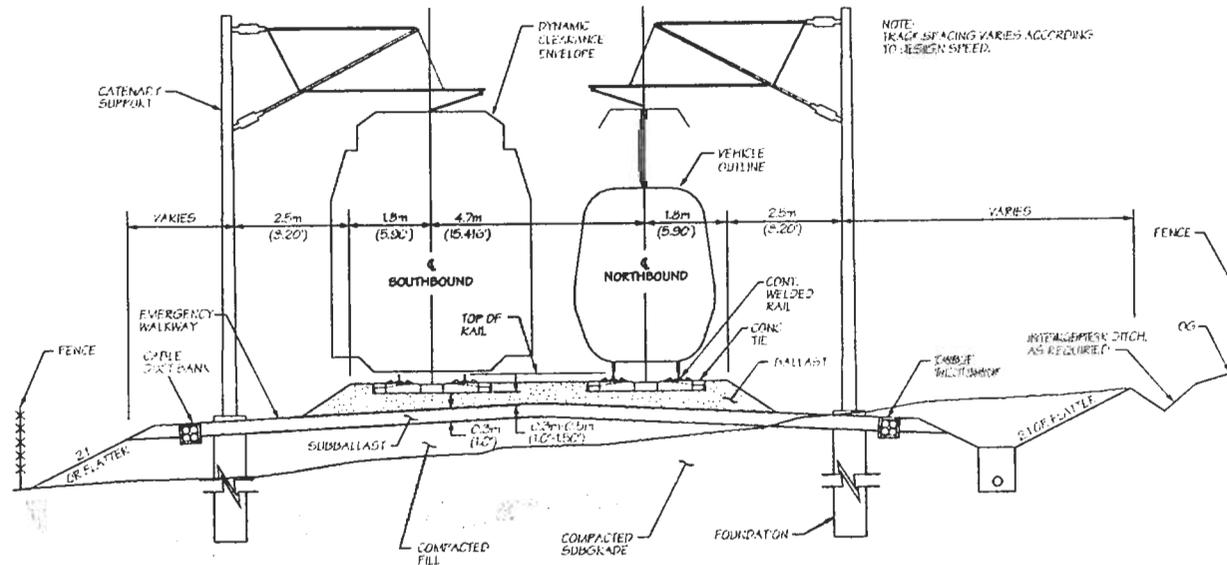


Figure 1.1  
At-Grade Ballasted Trackway

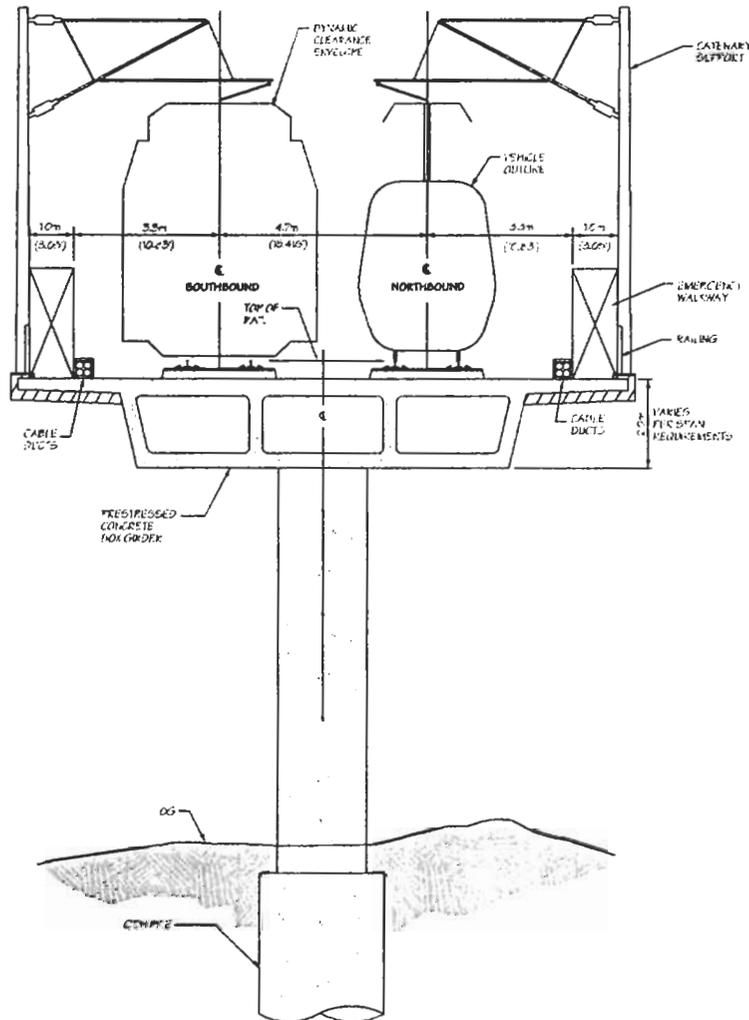


Figure 1.2  
Aerial Trackway

### Compatibility with Other Rail Services

The Authority has assumed that the dual track or guideway is dedicated exclusively to high-speed and compatible rail services. Presently, high-speed trains capable of speeds exceeding 200 miles per hour cannot share track or guideway with conventional rail operations, including the current generation of passenger equipment operated by Amtrak and regional rail authorities, as well as the freight equipment currently operated by the freight railroads. Where high-speed and conventional rail operations must share a right-of-way, the incompatible services must be separated horizontally or vertically. The high-speed tracks or guideway will be protected by an intrusion detection system and, in some areas, separated from conventional rail operations by a crash barrier or by placing the high-speed trains on an aerial structure.

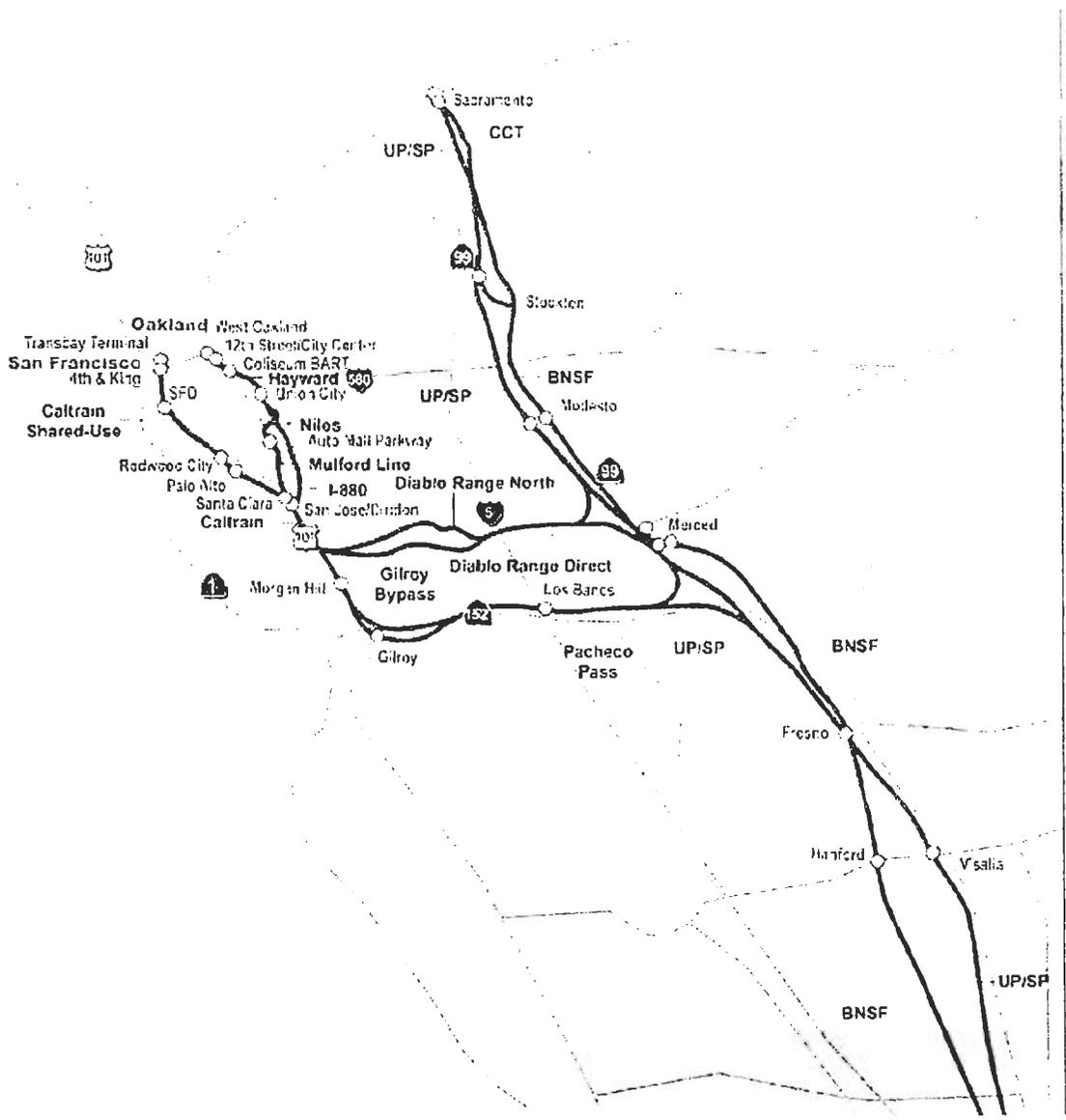
Federal Railroad Administration (FRA) rules do not allow for mixed operations of high-speed and conventional rail equipment, primarily because the two classes of equipment are designed to withstand different impact loads in the event of a collision. Because conventional rail equipment is much heavier and impact-resistant, the possibility of collision with a lighter high-speed trainset poses a potential safety hazard. The FRA may eventually adopt rules consistent with European practice that rely on collision avoidance rather than traffic separation. It is also possible that a high-speed trainset meeting both crashworthiness and high-speed performance specifications will be available during the implementation time frame of this project.



### 6.0 ALIGNMENTS AND STATIONS FOR FURTHER INVESTIGATION

The screening evaluation concluded with a set of recommended alignment and station locations for each region. Combining these recommended alignments and stations produces a statewide set of alignments and stations that the Authority has approved to be studied further in the EIR/EIS process. Figures 6-1 and 6-2 present the alignment and station options for further evaluation in the northern and southern portions of the system, respectively. The following sections define each the alignment and station options.

**Figure 6-1  
Alignment and Station Locations for Continued Investigation  
(Northern)**





**CITY OF LODI  
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**AGENDA TITLE:** Approve Comments on High Speed Rail Environmental Impact Report  
(SUPPLEMENTAL INFORMATION)

**MEETING DATE:** August 18, 2004

**PREPARED BY:** Public Works Director

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**RECOMMENDED ACTION:** That the City Council approve comments on the High Speed Rail Environmental Impact Report on the proposed California High Speed Train System.

**BACKGROUND INFORMATION:** The City has received the attached material concerning the High Speed Rail route to the Bay Area from the TRAC – Train Riders Association of California. This group is actively lobbying to have the High Speed Rail Commission reverse a previous decision eliminating the Sacramento/Bay Area connection via the Altamont from further consideration.

A copy of background material from the Commission on this topic is also attached. This material is taken from the Commission's "Confirmation of Previous Decisions (Compilation of Regional Report Excerpts)" dated October 1, 2001, and explains the reasons the Altamont corridor was not selected.

The San Joaquin Council of Governments has also been monitoring this issue. The Board previously took action supporting High Speed Rail and the Altamont alignment but has not taken further action. COG staff is submitting comments on the EIR/EIS, mainly focusing on alignments and station issues in the Stockton area.

**FUNDING:** Not applicable.

A handwritten signature in black ink, appearing to read "Richard C. Prima, Jr.", written over a horizontal line.

Richard C. Prima, Jr.  
Public Works Director

RCP/pmf

Attachments

cc: Rad Bartlam, Community Development Director

---

**APPROVED:** \_\_\_\_\_  
Janet S. Keeter, Interim City Manager

# TRAC

Train Riders  
Association  
of California

-926 J Street,  
Suite 612  
Sacramento  
CA 95814

(916) 557-1667  
(916) 448-1789 fax



RECEIVED

JUL 12 2004

CITY OF LOS ANGELES

July 12, 2004

Dear Councilmember:

Are you aware of the far-reaching effects high-speed rail will have on your community and the region? Where it is built is of crucial importance.

The mandate of the High Speed Rail Commission (Commission), which sunsetted as a state agency in 1999, was to move above the fray of local politics and objectively select a route that is best for California as a whole. The Commission produced its final route selection in 1999. The preferred route segments included an express bypass for the two-thirds of trains that would run through the Central Valley without stopping, keeping 200 mph trains out of Valley downtowns and neighborhoods. Also preferred was the Altamont Pass route, the most-traveled corridor between the Bay Area and the Central Valley. The final recommendation of the Commission was to have the Altamont route serve the Bay Area with two major lines, one terminating in San Jose and the other in San Francisco.

Today's High Speed Rail Authority (HSRA), however, has not been so objective. While the Commission chose Altamont as their preferred route, HSRA not only dropped Altamont from preferred status but *dropped the Altamont Route from consideration altogether*. This is wrong because Altamont has major advantages:

The Altamont Route serves a more populated region and provides better connections between Northern California cities. It is the only viable route for Sacramento and Stockton trips to the Peninsula and San Francisco. The HSRA's preferred route via Merced is over three times longer than today's Capitol Corridor and is therefore not time competitive.

Altamont gives San Jose its own line, its own trains and a stop right at the San Jose airport. Altamont gives Bay Area, San Ramon Valley, South Bay, San Joaquin Valley and Sacramento commuters a high-speed alternative route to jobs and provides significant congestion relief on Interstates 580 and 680.

The enclosed brochure explains why Altamont was and should again be the preferred route for high-speed rail. Additional copies are available on request. **We invite your city to discuss this issue and submit comments on the route selection to the High-Speed Rail Authority by the draft EIR deadline of August 31, 2004.** Comments should be submitted to: California High-Speed Rail Authority, 925 L Street, Suite 1425, Sacramento, CA 95814.

If you have any questions, please feel free to contact TRAC at (916) 557-1667.

Sincerely,

Alan C. Miller  
Executive Director

Enclosed: List of Altamont Route Supporters, Route Support Brochure

Alan C. Miller  
Executive Director

Jeanie Sherwood  
Office Manager

#### Officers

Richard Tolmach  
President

Roger Christensen  
Vice President

Hal Wanaseleja  
Secretary

Lynn A. Franks  
Treasurer

#### Board Members

Donald Bing  
Ventura County

Neil Bjornsen  
Los Angeles County

Adrian Brandt  
San Mateo County

Gerald Cauthen  
Alameda County

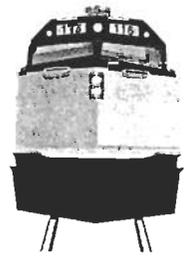
Michael Dickerson  
Los Angeles County

Michael Kiesling  
San Francisco

Ron Kilcoyne  
Los Angeles County

William F. McGeehan, III  
Contra Costa County

Dan McNamara  
San Mateo County



**These organizations support the study of an Altamont Pass route:**

1. Sierra Club
2. Planning and Conservation League
3. Bay Area Open Spaces Council
4. Train Riders Association of California
5. California Rail Foundation
6. Defenders of Wildlife
7. American Farmland Trust
8. Transportation Involves Everyone
9. Nature Conservancy
10. Surface Transportation Policy Project
11. Mountain Lion Foundation
12. Regional Alliance for Transit
13. Bay Rail Alliance
14. Transportation and Land Use Coalition

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San Francisco

Ron Kilcoyne  
Los Angeles County

William F. McGeehan, III  
Contra Costa County

Dan McNamara  
San Mateo County

**The following representatives support the study of an Altamont Pass route:**

1. **Senator Jackie Speier**, Representing San Francisco and San Mateo Counties
2. **Senator Don Perata**, Senate Majority Leader
3. **Assemblyman Darrell Steinberg**, Chair, Assembly Committee on Appropriations
4. **Assemblyman Mark Leno**, 13th District (San Francisco)
5. **Assemblyman Guy Houston**, 15<sup>th</sup> District (San Ramon Valley)
6. **Assemblywoman Wilma Chan**, 16<sup>th</sup> District (Oakland)

**ALTAMONT GIVES A BETTER ANSWER**

What does Northern California  
get from high speed rail?

Relief for congested and  
polluted travel corridors

Palo Alto Fremont Livermore ALTAMONT  
Tracy

Needless destruction of the  
Bay Area's last wilderness

DIABLO

Or sprawl at new stops  
built for speculators

Gilroy  
PACHECO Hollister Santa Nella  
Los Banos

# Why California Must Study the Altamont Pass Alternative In Its High-speed Rail EIR

The final planning documents filed by the California High Speed Rail Commission (HSRC) in 1996 stated that "Of the three northern mountain pass options . . . the Commission recommends the Altamont Pass for linking the Central Valley to the greater San Francisco Bay Area." HSRC found that "Public opinion primarily favors the Altamont Pass. Most cities and counties in the Northern San Joaquin Valley have passed resolutions favoring the Altamont Pass."

Now, as the High Speed Rail Authority (HSRA) prepares to file its environmental documents for the massive high-speed rail project, the Altamont route is not even being studied. Altamont is the best route for environmental, transportation, and cost reasons and must be included in the EIR/EIS:

## Altamont Has Fewer Impacts

"Overall, the Pacheco Pass option would have more negative environmental impacts as compared to Altamont Pass option."

- The Pacheco and Diablo routes now being favored by the Commission are predominantly undeveloped and cross the largest roadless wilderness area in the Coastal Range and the second largest state park in California. Damage from building high speed rail through this contiguous wilderness area will be severe and essentially unmitigable.



Photo: Gary Zahn



- The Pacheco/Hamilton routes would impact a biologically rich habitat with unique, intact California landscape of oak woodlands, sycamore valleys, stream-fed canyons and pine topped ridges. Both routes would affect species such as bobcats, mountain lions, the San Joaquin kit fox, tule elk, pronghorn, golden eagles, wintering bald eagles, red-tail hawks, burrowing owls, the California tiger salamander, red-legged frog, western pond turtle, rainbow trout, foothill yellow-legged frog, and bay checkerspot butterfly.

- By contrast, Altamont, route of Interstate 580 and 680, is one of the busiest transportation corridors in the Bay Area. CEQA requires that high-volume transportation corridors be given preference over those with lower volume and population.

- The Pacheco/Hamilton routes would promote new sprawl by opening up transportation corridors where none currently exist, including a new Pacheco Route station on rural land near Santa Nella, about 7 miles from Los Banos and 1.5 miles east of Interstate 5. Construction of this station is likely to spawn a new suburb with unacceptable air quality impacts for the Central Valley.

- HSRC has found that Pacheco has the "Highest potential for water resource impacts." "There are substantially more water crossings associated with



[the Pacheco] alignment including 20 small streams between the San Joaquin River and Los Banos." HSRC also found that visual impacts are much greater for the Pacheco alignment than for Altamont.

## Altamont Has Lower Costs

The High Speed Rail Commission estimated that the Altamont route would cost significantly less to build, saving between \$720 million and \$2 billion.

- Altamont has fewer miles of track, therefore substantially lower capital, maintenance and operating costs for the entire life of the high speed rail project.
- Pacheco/Hamilton require many more miles of tunnel construction, and therefore massive increased capital costs, than Altamont. According to HSRC, "Since it is shorter and has fewer tunnels, the Altamont Pass is less costly than the Pacheco Pass."
- Pacheco/Hamilton have longer grades and more altitude gain than Altamont. This means slower trains, more fuel consumption, and rougher operating conditions. Put another way, "The Pacheco Pass is . . . 37-45 percent higher [than Altamont] on a per mile basis."
- Altamont would allow MTC / HSRA to work together to build a railroad bridge at Dumbarton, minimizing the cost and impact of the already-planned bridge.

## Altamont Serves More Travel

"The . . . alignment . . . which incorporates the Altamont Pass would generate the highest ridership and revenue for a Los Angeles - Bay Area System." - California High Speed Rail Commission

- Altamont is about 50 minutes quicker from Sacramento to San Francisco than Pacheco, and would speed commuters along the Interstate 80, 580 and 680 corridors. The Pacheco route would actually take longer than current Capitol Corridor or ACE trains and therefore would produce negligible congestion relief on Interstates 80, 580 and 680.



- Altamont allows San Francisco trains to reach dedicated high-speed track much sooner after leaving San Francisco, providing the less-than-3-hour Los Angeles travel time required by the bonding legislation. This is of key importance to the success of high speed rail since Peninsula ridership is double that of San Jose. Dedicated San Jose trainsets would provide equally frequent service to San Jose, with only 10 minutes more travel time to San Jose.

- The Altamont route links more cities, reducing more automobile trips and improving air quality. Altamont would serve numerous San Joaquin Valley and Tri-Valley cities in the initial stage of development including Merced, Turlock, Modesto, Manteca, Tracy, Livermore, Pleasanton, Dublin, San Ramon and Fremont.



City lights from space.

- The Altamont route directly serves nearly one million people residing in these ten cities. By contrast, the Pacheco alignment serves Los Banos, Gilroy and Morgan Hill with combined populations of only 100,000 people.

- Altamont's direct connections to existing public transit systems, including BART at Livermore and Fremont, will reduce station costs and increase ridership. Altamont ridership would exceed that of the other alignments, because it runs closer to the center of population of the Bay Area, and can provide superior service for an additional three million people in the East Bay, Stockton and Sacramento who would benefit from faster travel times.

## Trains and Passengers get a Smoother Grade via Altamont Pass





# **TRAC**

Train Riders Association of California

TRAC, active since 1984, is a non-profit consumer lobby advocating improved passenger train service in California.

**Please contact TRAC for further information.**

926 J Street #612, Sacramento, CA 95814

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[trac@omsoft.com](mailto:trac@omsoft.com)

[www.calrailnews.com](http://www.calrailnews.com)

## 2.0 BAY AREA TO MERCED REGION

### 2.1 ALIGNMENT AND STATION DEFINITION

This section describes alignments and stations that were previously studied for high-speed train service by the High-speed Rail Commission or the current High-Speed Rail Authority. Alignments previously studied but since withdrawn from consideration are described first in Section 3.1. Reasons for their withdrawal are provided.

### 2.2 ALIGNMENTS PREVIOUSLY REVIEWED BY HIGH-SPEED RAIL COMMISSION AND AUTHORITY BUT WITHDRAWN FROM CURRENT CONSIDERATION

Three alignments were previously reviewed by the High-Speed Rail Commission and Authority but have since been withdrawn from consideration: (1) Altamont Pass, and (2) Panoche Pass, and (3) I-80 corridor from Oakland to Sacramento. The I-80 corridor may be reevaluated at a future date as a possible extension of a baseline high-speed train system.

#### 2.2.1 Altamont Pass Alignment

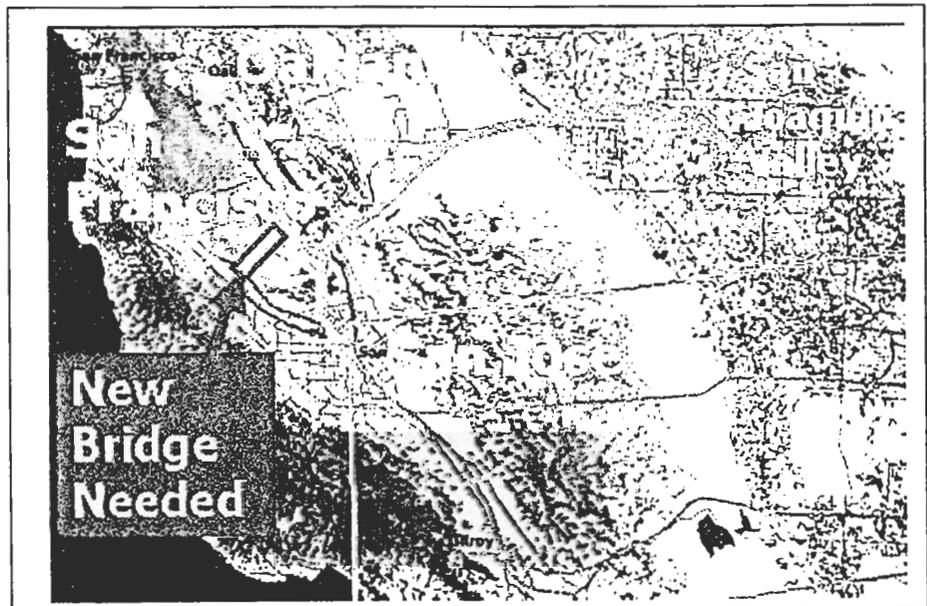
One Alignment evaluated in prior studies would pass from the San Joaquin Valley over the Altamont Pass into the Bay Area. For this Altamont Pass alignment, individual high-speed trains would not be able to serve San Jose, San Francisco, and Oakland.

An Altamont alignment would require incoming trains to travel to only one of these three destinations.

Consequently, service to the Bay Area would be compromised, and total ridership would be lower for an Altamont Pass alignment as compared to the Pacheco Pass Alignment.

The HSRA staff analysis, as summarized in the July 14, 2000 Revised Staff Recommendations for VHS Route Adoption,

recommended the Pacheco Pass rather than the Altamont Pass alignment for the reasons identified above. The analysis noted that significant trade-offs exist between the Altamont and Pacheco Pass alignments. While the Pacheco Pass Alignment was previously estimated to be approximately \$2 billion more costly than an Altamont Alignment because of its longer length, a Pacheco Pass alignment was forecast to have higher ridership and revenue potential from the Central Valley to San Francisco (See Table 2.1-1). Using Year 2015 forecasts, the Pacheco Pass Alignment is estimated to have 1.1 million more riders per year and \$56 million more in annual revenues than the Altamont Pass Alignment.



**Table 2.1- 1**  
**Annual Ridership and Revenue for High Speed Trains**  
**Pacheco and Altamont Pass VHS Alignments (millions)**

Alignment	Bay Area Northern Terminus		
	San Francisco	Oakland	Both*
Pacheco Pass			
Riders	21.12	20.49	21.10
Revenue	\$744	\$725	\$746
Altamont Pass			
Riders	20.02	18.95	
Revenue	\$688	\$657	
*Ridership via Pacheco Pass to San Francisco and Oakland is shown without adding additional trains, i.e., SF and Oakland would each be served with half as many trains in comparison to a terminus at either SF or Oakland. Via the Altamont Pass, however, it is not possible to serve both San Francisco and Oakland along with San Jose.			
Source: Final Report, California High-Speed Rail Corridor Evaluation, HSR-98004, December 30, 1999.			

These two mountain passes also differ in how they would serve Central Valley and Bay Area populations. The Altamont Pass would offer superior service to the Bay Area from the fast growing San Joaquin County area and would provide faster travel times between Sacramento and San Jose or San Francisco. This is the reason this alignment is favored by some Central Valley leaders. An express train traveling between Sacramento and San Jose would take 47 minutes via the Altamont Pass compared to 82 minutes via the Pacheco Pass.

Although the Altamont Pass would provide a more direct link between San Joaquin and Stanislaus counties and the Bay Area population centers, this corridor represents a relatively short distance market with ridership characteristics more fitting a commute corridor than an intercity corridor. The distance between the SR-99 Junction and the San Jose high-speed station would be 66 miles (89 miles to San Francisco). Stanislaus and San Joaquin counties are working with Contra Costa, Alameda and Santa Clara counties on a cooperative transportation planning approach to serve commuters living in the northern Central Valley and working in Southern Alameda county and the Silicon Valley.

Compared to the Altamont Pass, the Pacheco Pass Alignment would reduce travel times between Los Angeles and San Jose by at least 10 minutes (See Table 2.1-2).

However, the greatest benefit of the Pacheco Pass is that all trains would pass through San Jose, regardless of whether San Francisco, Oakland, or both were served. Therefore, from an operational perspective, the Pacheco Pass Alignment would be superior alignments for serving the largest Bay Area markets. The Altamont Pass Alignment would require the system to split at Newark/Fremont to serve either San Jose or San Francisco (or Oakland). This means that only some trains passing through the Altamont Pass from Los Angeles would go to San Francisco, some to Oakland, and some to San Jose. The Pacheco Pass therefore would have superior frequencies of service to the Bay Area and would be less costly and easier to operate.

**Table 2.1-2**  
**VHS Travel Time to the Bay Area from Los Angeles**  
**Compared for Pacheco and Altamont Pass Alignments (minutes)**

Alignment	VHS Express Travel Time from Los Angeles to:	
	San Jose	San Francisco
Pacheco Pass	122	150
Altamont Pass	132	153

Source: Final Report, California High-Speed Rail Corridor Evaluation, HSR-98004, December 30, 1999.

For the Pacheco Pass Alignment, the number of annual riders to San Jose in the Year 2015 is projected to be 3.3 million, with 5.7 million riders using the downtown San Francisco Station. In contrast, operations under the Altamont Pass Alignment would cut service levels by half to each destination due to the split at Newark/Fremont. Moreover, travel times to San Jose from Los Angeles via Altamont would increase by 10 minutes. As a result, system ridership would drop by 1.1 million per year (See Table 2.1-1).

Another negative aspect of the Altamont Route is that it would require building a new bridge across the environmentally sensitive San Francisco Bay for service to San Francisco.

### 2.2.2 Panoche Pass Alignment

A Panoche Pass Alignment was also reviewed in prior high-speed train studies. This pass is 35-40 miles south of the Pacheco Pass. A Panoche Pass Alignment would be more expensive and would have lower ridership than the Pacheco Pass Alignment. Compared with the Pacheco Pass Alignment, the Panoche Pass Alignment would cost about \$0.5 billion additional for just the mountain pass segment alone.<sup>1</sup> The difference in total system cost with respect to the Pacheco Pass Alignment would be even higher, given the added distance through the Panoche Pass. Although service from Los Angeles to the Bay Area via the Panoche Pass would be slightly faster than via the Pacheco Pass, ridership would be lower by an estimated 300,000 riders per year because the Merced area would not be as well served. In addition, the Panoche Pass Alignment would reduce the high-speed train service provided to the northern portion of the Central Valley (e.g., Stockton and Sacramento), in that trips from northern California to the Bay Area would take substantially longer via this pass.

### 2.2.3 I-80 Corridor from Oakland to Sacramento

Previous High-speed Rail Commission studies considered the I-80 corridor to link the San Francisco Bay Area and Sacramento. These studies concluded that the existing "Capitol" rail service should be improved to speeds of up to 110 mph and would serve as a feeder system to the statewide high-speed train system. The existing rail corridor between Oakland and Benicia has major curve and speed constraints and cannot be upgraded to achieve high speeds without major capital cost implications. The distance between Oakland and Sacramento is relatively short when viewed as an intercity market, and high-speeds are not needed to serve this market. However, a trip from Sacramento to Los Angeles via the I-80 corridor would be approximately 1½ hours longer through the San Francisco Bay Area than a trip from Sacramento to Los Angeles through the Central Valley. Capitol Corridor rail service currently exists between San Francisco and Sacramento, and operating and rail improvements are anticipated for this service. This alignment could be considered as a potential future extension of the high-speed train system but is not proposed to be included in the initial baseline system or in the Program EIS/EIR.

<sup>1</sup> Intercity High-Speed Rail Commission, High-Speed Rail Summary Report and Action Plan, Final Report, December 1966, Table 8.5.