

FRESNO COUNTY SUBSECTION OF THE CALIFORNIA HIGH- SPEED TRAIN (HST)

- The Fresno County subsection of the California High-Speed Train System (HST) is analyzed in two separate EIR/EISs – the Merced-Fresno EIR/EIS and the Fresno-Bakersfield EIR/EIS. The EIR/EISs are currently undergoing public review. The purpose of this fact sheet is to summarize potential impacts within the Fresno County subsection of the route.

- First-tier EIR/EIS documents evaluated the overall HST System and determined general alignments and station locations for further study in second-tier EIR/EISs (*2005 Final Program EIR/EIS for the Proposed California High-Speed Train System* and the *2008 Bay Area to Central Valley HST Final Program EIR/EIS*)
- The Merced-Fresno and Fresno-Bakersfield EIR/EISs build on the earlier program EIR/EISs and provides more site-specific and detailed analysis.

- The Merced-Fresno Section includes an HST station in Merced. The Fresno-Bakersfield Section includes HST stations in Fresno and Bakersfield, with a third potential station near Hanford.
- Project construction in the Central Valley is expected to be completed within 7 years from initial construction through operational testing. The HST stations would likely require the longest consistent construction time (approximately 3 to 4 years).
- The Central Valley HST project would commence operation in approximately 10 years with full operation of the entire system in approximately 25 years.



- The cost of the Merced-Fresno route, considering the various alternatives, ranges between \$1.3 and \$3.4 billion.
- The total cost of the Fresno-Bakersfield route is estimated at \$7.01 billion. A Heavy Maintenance Facility (HMF), proposed south of Fresno, would cost an estimated \$620 million. The total cost of the Merced to Bakersfield sections would therefore be approximately \$11 billion, including an HMF at one of 10 alternative sites.
- The construction cost for the Fresno subsection is estimated at \$4-5 billion.

- In 2035 for the high ridership scenario, four trains per hour would stop at the Fresno station in each direction at the peak, and six trains run through. At the off-peak, the same number of stops would be made, but the through trains would decrease to three per hour.
- As trains will run from 6:00 am to midnight, this totals an estimated 142 trains per day, of which 72 would stop and 70 would run through.

- The total length of the Merced to Bakersfield sections is 204 miles, of which 142 miles will be at grade and 62 miles elevated. The total length for the Fresno County subsection is 28 miles, of which 25 miles are at grade and 3 miles are elevated.
- While several vertical alignment options were evaluated, building the HST primarily at grade was determined to be the only practicable construction method for the Fresno subsection.

The Fresno Subsection Route

- Beginning in the north, the HST would be on an elevated structure to cross the San Joaquin River and Herndon Avenue, returning to at-grade south of Herndon and remaining at-grade to the downtown Fresno Station.
- In this area, Golden State Boulevard would be shifted to the west to for approximately 4.5 miles to accommodate the HST.
- At Shaw Avenue, a new overcrossing would be constructed over the HST and UPRR corridors. New roadway connections to Golden State Boulevard from Shaw Avenue would be provided.

- Between Ashlan and Clinton, the HST alignment would be accommodated on existing Caltrans right-of-way by shifting SR 99 100 feet to the west for approximately 2.3 miles.
- South of Clinton, new overcrossings would be constructed at McKinley, Olive, and Belmont to carry traffic over the HST and UPRR corridors. To accommodate the HST alignment, Golden State Boulevard would be shifted to the west between Clinton and Olive and would be closed between Olive and Belmont adjacent to Roeding Park.
- As part of the downtown station design, Tulare Street would become either an overpass or undercrossing of H Street, the HST and UPRR.

- From the Fresno Station, the HST would go underneath SR 41 and continue southeast on the western side of the UPRR until reaching Jensen. The alignment would be below grade in a shallow trench as it travels underneath the Jensen bridge and would then elevate over Golden State Boulevard and SR 99. Returning to grade the alignment joins the BNSF Railway right-of-way on its western side south of Fresno.
- The HST would continue through rural Fresno County at grade along the BNSF right-of-way. The alignment would again be elevated where it crosses the BNSF tracks near Conejo Avenue. The alignment would be at grade with bridges where it crosses Cole Slough and the Kings River into Kings County.

- The Fresno Station–Mariposa Alternative would be centered on Mariposa Street and bordered by Fresno, Tulare, H, and G . The station building would be two-levels and approximately 75,000 square feet. The station would encroach on the historic Southern Pacific depot and displace the existing Greyhound bus depot.
- The Fresno Station–Kern Alternative is similarly situated and would be centered on Kern Street between Tulare and Inyo. This station would include the same components as the Mariposa Alternative, but would not encroach on the Southern Pacific Depot or require relocation of the Greyhound facilities. It would, however, require removal of the historic Hobbs Parson building which houses the Fresno Fire Department headquarters.

- The Fresno station would occupy several blocks and would include plazas, drop-offs, a multimodal transit center, and parking structures. Four tracks would pass through the station, with two express tracks separated from those that stop at the station. The footprint for the four-track section extends approximately 3,000 feet on either side of the station, or a total distance of 6,000 feet.
- Parking demand at the Fresno Station is estimated at 7,400 spaces in 2035. Based on the amount of excess public parking within 1 mile of the station, it is estimated that the 2035 parking demand can be met with a total of 5,000 parking spaces provided in four new parking structures built adjacent to the station by 2035.

- The Merced-Bakersfield Sections may include a Heavy Maintenance Facility (HMF). The HMF would require 150 acres with 1,200 to 1,500 employees and 1,200 parking spaces. The EIR/EISs evaluate 10 potential HMF sites.
- For the Merced-Fresno section, five alternative HMF locations are analyzed including north of Merced (Castle Commerce Center) and four locations in the Chowchilla area.
- For the Fresno-Bakersfield section, five HMF site alternatives are evaluated: The Fresno Works–Fresno HMF Site – Located south of Fresno between SR 99 Adams Avenue, as well as locations in Kings County near Hanford; the Wasco site in Kern County; and the Shafter East and Shafter West HMF Sites in Kern County.

ENVIRONMENTAL CONSEQUENCES

Traffic

- The Fresno station would generate 4,370 daily trips in 2035 with 650 trips occurring in the am and pm peak hours.
- The HMF would generate 3,000 daily trips with 300 trips occurring during both the AM and PM peak hours.
- Under 2035 conditions, two roadway segments, Tulare between Broadway and Van Ness, and Divisadero Street would experience a change in LOS from D to E.
- For 2035 conditions, 30 intersections would be impacted by the project, 12 in the AM peak, and 27 in the PM peak. These intersections would either degrade to LOS E or F.

24 New Grade Separations in Fresno County with HST, including

- Shaw Ave
- Ashlan Ave (replace overcrossing)
- Clinton Ave (replace overcrossing)
- McKinley Ave
- Olive Ave
- Belmont
- Stanislaus (modify overcrossing)
- Tuolumne St (modify overcrossing)
- Fresno St (modify undercrossing)
- Tulare St (new overcrossing or undercrossing)
- Ventura St
- Church Avenue - A separate pedestrian bridge would also be required.
- Manning Avenue
- Chestnut Avenue/Mountain View (combined overpass solution)

Air Quality

- **Construction:** Construction of the HST has the potential to cause significant but temporary air quality impacts. Even with mitigation, impacts related to construction would be significant given the size of the project and construction effort.
- **Operation:** Operation of the HST alternatives would generally reduce regional criteria and GHG pollutants and would have a beneficial impact on air quality.
- Common benefits to regional air quality would come from a reduction of VMT and airplane emissions. Additionally, the project would have the common benefit of meeting GHG reduction measures

Noise and Vibration

- The HST at grade and at 220 mph, generates noise levels of approximately 100 dB at 100 feet from the centerline. The HST at grade under normal operations is slightly noisier but roughly equivalent to a typical freight train.
- Operation of the HST would increase noise levels above the ambient by as much as 22 dB. The analysis shows potential for moderate to severe noise impacts for many receivers along the alignment.
- Various options exist to address potentially severe noise effects, including: Sound barriers - between 5 and 15 dB noise reduction; building insulation in residences and institutional buildings (5 to 7 dB noise reduction); and acquire easements on properties severely affected by noise.

Energy and Utilities

- The Fresno subsection would cross 23 electrical transmission lines, 22 natural gas distribution lines, 19 petroleum and fuel lines, 13 canals, and 141 water/sewer lines.
- The Authority would work with PG&E, SCE, and other utilities during final engineering design relocate transmission lines, protect them in place, or work with pipeline owners to place affected lines underground in a protective casing.
- Although the HST System would result in an increase in electricity demand, it would reduce the energy demands from automobile and airplane travel, resulting in an overall beneficial effect on statewide energy use.

Socioeconomics

- The HST would generate \$14 million in sales tax during construction, including \$7 million in Fresno County.
- The HST station would revitalize the downtown, resulting primarily in beneficial social impacts.
- Construction jobs would peak during heavy construction years (2014–2017) at 3,900 workers annually (1,300 construction jobs and 2,600 jobs in other sectors). The existing labor force should be sufficient to fill the demand, although some skilled workers will come from other areas.
- Approximately 47,500 new jobs would be created by 2035 in the region as a result of the HST, including 2,000 jobs to operate the project and additional jobs created by improved connectivity and growth in the regional economy.

Displacement of Homes and Businesses

- For the Merced–Bakersfield sections there would be an estimated 370 residential units with 1,100 persons displaced. An estimated 360 businesses would be displaced with 8,800 employees.
- In the Fresno County subsection, an estimated 95 residential units and 280 residents would be displaced and an estimated 80 businesses with 2,000 employees would be displaced.
- Fresno County has available housing units as well as many commercial and industrial vacancies offering opportunities for nearby relocation.
- The Fresno Mariposa Station would displace 5 businesses with 47 employees. The Fresno Kern Station would displace 3 businesses with 68 employees. Sufficient numbers of potential replacement sites are available for relocation.

Agricultural Lands

- The HST will convert 2,211 acres of important farmland to HST uses, of which 1,313 acres are in the Williamson Act. Kings County would have 733 acres of converted farmland, while Fresno County has 555 acres, with 255 acres in the Williamson Act. An additional 150 acres of prime farmland is likely to be converted for the HMF.
- The project will purchase agricultural conservation easements at a ratio of no less than 1:1 to preserve Important Farmlands in the amount commensurate with the quantity and quality of converted farmlands.

Parks

- **Camp Pashayan.** To construct an elevated structure, 0.6 acres of Camp Pashayan would be purchased. The site will also be used for construction staging.
- **Roeding Park.** Golden State Boulevard would be closed between Olive and Belmont and the HST would occupy the road alignment at grade. South of the park, tracks would descend below ground to cross under SR 180. Severe noise impacts would occur along the eastern boundary of the park, increasing 14 dB above the ambient. A 2,800 foot long sound barrier 14 feet tall would reduce the noise level. Discussions with the City are under way to determine noise and visual impacts.
- **Chukchansi Park.** Chukchansi Park is located 70 feet east of station construction and adjacent to a grade separation of Tulare Street required for the HST. Chukchansi Park would experience noise and visual change as well as access restrictions from Tulare Street.

Historical Resources

- The Fresno Mariposa Station Alternative would cause substantial adverse changes to one historical resource through demolition (the Del Monte building on Tulare Street).
- The Fresno Kern Station Alternative would require removal of two historic structures – the Hobbs Parsons Produce Building (Fresno Fire Department headquarters), and the Del Monte building on Tulare Street.
- Construction of a Tulare Street overcrossing would compromise the historical integrity of the Southern Pacific Depot, the Bank of America Building at Tulare and Fulton, and the Hobbs Parsons Produce Building (with the Mariposa Station alternative). The HST also includes an option for an undercrossing at Tulare that would have no adverse effect on these historic properties.

REVIEW AND DECISION MAKING

- The Draft EIR/EIS is circulated for a 60-day comment period, ending on October 13, 2011. The document is available at the Authority offices, public libraries in the study area, and on the Authority's website.
- The Authority will identify a preferred alignment alternative, site for each station, and a preferred HMF facility. The Authority will prepare a Final EIR/EISs that will include responses to comments and a description of the preferred alternative and proposed mitigation.
- After completion of the environmental process, the Authority would complete final design, obtain construction permits, and acquire property prior to construction, as shown below.

