



California High-Speed Rail Big Picture

The California High-Speed Rail Authority (Authority) is responsible for planning, designing, building and operation of the first high-speed rail system in the nation. California high-speed rail will connect the mega-regions of the state, contribute to economic development and a cleaner environment, create jobs and preserve agricultural and protected lands. By 2029, the system will run from San Francisco to the Los Angeles basin in under three hours at speeds capable of over 200 miles per hour. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. In addition, the Authority is working with regional partners to implement a statewide rail modernization plan that will invest billions of dollars in local and regional rail lines to meet the state's 21st century transportation needs.

California's 170,000 miles of roadway are the busiest in the nation. Auto congestion drains \$18.7 billion in lost time and wasted fuel from the state's economy every year. Meanwhile, travel on California's Interstate system is increasing at a rate five times faster than capacity is added. Flights between the Los Angeles area and the Bay Area – the busiest short-haul market in the U.S. with 5 million passengers annually – are the most delayed in the country, with approximately one of every four flights late by an hour or more.

Over the next 30 to 40 years, California will add the current population of New York state to its current 38 million residents. Meeting the transportation demands associated with that growth will require major infrastructure investments. The question is not if those investments need to be made, but how those investments can provide the greatest benefits.

It's clear that California cannot provide an effective transportation system for 50 million to 60 million residents with a "more of the same" approach.

California's history of investing in game-changing infrastructure improvements has been a key contributor to its economic-powerhouse status. High-speed rail is a logical next step. The experience of other countries – California's competitors in the global economy – demonstrates that high-speed rail is integral to building a more efficient transportation system, boosting economic productivity and promoting a more sustainable society.



"If you believe that California will continue to grow, as I do, and that millions more people will be living in our state, this is a wise investment. Building new runways and expanding our airports and highways is not the only alternative."

**- Edmund G. Brown Jr.,
Governor of California**

HIGH-SPEED RAIL MORE COST EFFECTIVE THAN ALTERNATIVES

Providing the equivalent new capacity on the state's highways and airports would cost more than double the investment required to develop a high-speed rail system between San Francisco and Los Angeles. If it was even possible, that would mean building 4,300 new highway lane miles, 115 additional airport gates, and four new airport runways at an estimated cost of \$158 billion. While the high-speed rail system will operate without subsidies, Caltrans estimates operations and maintenance costs on those new highway lanes at \$132.8 billion for over 50 years.

CALIFORNIA GEOGRAPHY IS PERFECT FOR HIGH-SPEED RAIL

California's geography positions it perfectly for a successful high-speed rail system. Existing international systems have proven that high-speed rail is much more efficient, economical and environmentally beneficial than cars and airplanes for intercity trips between 100 and 600 miles. When compared to the cost, time, required energy and greenhouse emissions of air and auto travel, high-speed rail will generate huge savings.

HIGH-SPEED RAIL STRENGTHENS CALIFORNIA'S ECONOMIC COMPETITIVENESS

California's high-speed rail system will spur economic development, enhance environmental and energy goals, create near and long-term employment, improve mobility and save money over the coming decades. Californians began to see these benefits in 2014, when initial construction began and provided a much needed economic boost to the Central Valley. It is estimated that construction will produce 20,000 jobs annually for five years. Connecting Los Angeles and San Francisco will generate 66,000 jobs annually for 15 years and the Phase 1 Blended System will generate 2,900 permanent operations jobs.

As the Golden State's great economic centers are connected, our economy will be given the opportunity to grow in ways never before imagined. Meanwhile, goods will move more freely from our ports to vital markets as freight rail traffic is alleviated. California's workers, who waste too much time and money in cars and at airports, will spend their time more productively. These are just a few of the ways in which high-speed rail will induce economic development.

HIGH-SPEED RAIL PROVIDES AN EXCELLENT RETURN ON THE INVESTMENT

The \$2.6 billion initial state investment in high-speed rail from Proposition 1A bond funds will produce a net economic impact of \$8.3 to \$8.8 billion – a 3:1 return. State and local governments will earn more than \$600 million back in tax revenue, or nearly 25 percent of what the state will spend on initial construction of the high-speed rail system.

ENVIRONMENTAL AND QUALITY OF LIFE BENEFITS

- Tree planting and other programs will result in approximately 520,000 tons of GHG reductions
- In first year of operation high-speed rail will take the equivalent of 31,000 passenger vehicles off the road
- The Caltrain electrification program will reduce an estimated 68 thousand tons of CO₂ a year starting in 2019

"A major new high-speed rail line will generate many thousands of construction jobs over several years, as well as permanent jobs for rail employees and increased economic activity in the destinations these trains serve."

- President Barack Obama

CALIFORNIA HIGH-SPEED RAIL CONNECTING CALIFORNIA

