

High-Speed, High-Capacity Transportation

California high-speed rail will fundamentally transform how people move around the state. In keeping with Proposition 1A requirements, Phase 1 will connect San Francisco to Los Angeles/Anaheim via the Central Valley in under three hours on electrified trains capable of speeds of 200mph or greater.





Today's population of 40 million people is already straining California's transportation network, and the state's population is expected to grow to 42.6 million by 2040. Our highways and roads rank among the busiest in the nation and are nearing, or already exceeding, their capacity. Similarly, California's airports are at or near full capacity.

Despite planned investments in airports and highways, California is facing a transportation capacity crisis. To keep pace, California must expand transportation capacity to improve mobility.

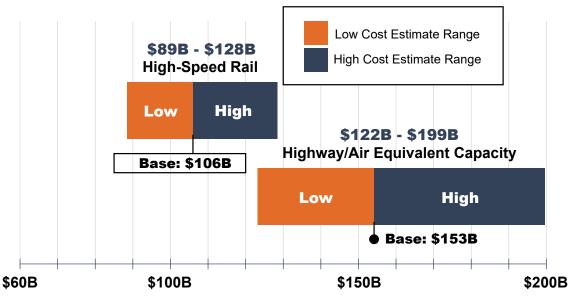
High-speed and regional rail systems will connect at key multimodal hubs, like San José, Merced, Palmdale and Los Angeles, speeding travelers to their destinations. Rail connections to airports will facilitate transnational and international travel.

Electric high-speed rail will serve as the backbone for a modern, integrated statewide passenger rail network that will connect California's urban, suburban and rural communities with fast, frequent service. Adding the San Francisco to Los Angeles/Anaheim high-speed rail system to the state's transportation network is equivalent to adding a new major airport and a six-lane highway between San Francisco and Los Angeles.

COST OF ADDING CAPACITY

In total, the state would need to construct approximately 4,200 new highway lane miles plus 2 new airport runways and 91 more airport gates to equal the people-carrying capacity of high-speed rail. Building the equivalent roadway and airport capacity would cost about twice as much as high-speed rail.

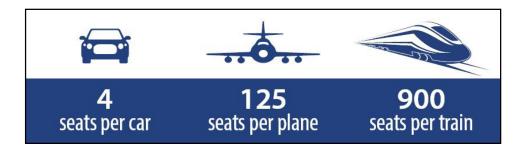
As shown, the cost for that level of highway and airport investment is approximately \$153 billion and ranges from \$122 to \$199 billion.. In contrast, the current cost estimate for the Phase 1 high-speed rail system is approximately \$106 billion and ranges from \$89 to \$128 billion.



This is based on a cost forecasting/escalation for 2040. The previous figure from the 2019 report is based on pre-COVID-19 travel assumptions, the 2018 Travel Demand Model, and Caltrans planning assumptions from 2019.

DEMONSTRATING THE BENEFITS OF HIGH-SPEED RAIL

Electrified high-speed rail will provide a new mobility to keep California moving and help meet the state's air quality and climate goals more effectively and at less cost. High-speed rail trains can move more people across the state, compared to other modes of transit.



High-speed rail will provide significant new intrastate travel capacity by connecting California's economic and population centers. In addition to being a less expensive alternative, diversion of intrastate travel from highways and airports to high-speed rail will:

- Allow for existing infrastructure to accommodate future highway and airport growth;
- Improve transit connectivity and linkages to the existing passenger rail network at high-speed rail stations; and
- Allow California's major airports to focus additional resources to support the growing demand for international travel, a major catalyst for ongoing economic development.









