

California high-speed rail: good for the State, good for the environment

California continues to lead the United States' efforts to accelerate high-speed rail, writes Jeff Morales, CEO of the California High-Speed Rail Authority. As proposed projects pop-up in states like Texas, Ohio, Florida, and Illinois, our project is the one that people look at as an indicator of whether or not high-speed rail will happen in America.

California is an ideal location for high-speed rail. As the eighth largest economy in the world, improved transportation and accessibility to financial and commercial hubs like San Francisco and Los Angeles is essential to doing business. With a population of 38 million people, which is forecasted to go up by another 12 million in the next 20 years, now is the time to ensure that we are able to move people quickly and efficiently. And as the home to seven out of the top 10 worst air-quality cities in the country, there is a public health problem that can be partially addressed by getting cars off of the road and planes out of the sky.

The California High-Speed Rail Authority (Authority) was given an edict from voters in 2008 by Proposition 1A; build a high-speed system that would be able to connect Californian's through rail travel. Since 2012, work has been underway in California's Central Valley building the backbone of high-speed rail. This work will connect major metropolitan communities like Bakersfield, Fresno, and Merced with the state's economic hubs in Los Angeles, San Francisco, and Silicon Valley. At the same time, the Authority is pumping millions of dollars into improving local and regional commuter rail. Projects such as the proposed electrification of the San Jose to San Francisco regional rail

corridor and the San Francisco Central Subway project will create more efficient and enjoyable rail experiences for local communities, while helping connect Californians to the larger high-speed rail system.

Like almost every big and transformative infrastructure project, the proposed high-speed rail system faces its share of challenges. Big, bold infrastructure investment are never easy; some of California's most important projects - the Golden Gate Bridge, State Water Project, and the world renowned University of California system - all faced early scepticism and significant and organised opposition. Lawsuits to stop the projects were in the thousands, and political support often resulted in passage by the narrowest of vote counts. Funding for these multigenerational investments spanned several decades, and Californians are still investing in them for the benefit of future generations.

Despite the challenges, this is a project worthy of our state. By 2030, high-speed rail will reduce vehicle miles travelled by the equivalent of removing a 500-mile (804.67kms) lane of cars. A decade later, the vehicle miles travelled will be reduced by almost 10 million a day. High-speed rail will also allow for Californians to change their air travel habits. Currently, the flight from Southern California to the Bay Area is the busiest short haul market in the United States, with one in six flights leaving from Southern California airports heading north towards the San Francisco Bay Area. We forecast a reduction of as many as 171 flights a day as travellers hop on high-speed trains instead of planes. Freeing-up this space by shedding short-haul plane trips allow airlines to focus on servicing transcontinental and international flights, which are less environmentally harmful for the state and more profitable for the airline industry.

Already, 168 certified small businesses are committed to working on the programme, with 45 of those small businesses located in the Central Valley. These communities have unemployment rates nearly



Shown is a statewide rail modernisation map. California's high-speed rail system will work with existing regional rail to improve and connect local rail systems to the statewide high-speed rail network.



Shown is a picture of the California high-speed rail train as it runs through California's Central Valley. The high-speed rail system will connect California's Central Valley to the state's major economic hubs in San Francisco and Los Angeles.

twice the state average, so bringing jobs immediately to the area was a key part of our programme. So far, the high-speed rail programme has created almost 10,000 jobs throughout the state, and once large-scale construction begins this year, the programme will employ 20,000 people a year during the first five years of construction. By 2030, the system will have created almost one million jobs.

California's Governor and legislature felt so strongly about highspeed rail as a catalyst for positive economic and environmental change that they've recently allocated 25% of California's annual cap and trade auction revenue to high-speed rail on an ongoing basis. This investment shows the federal government and outside investors that Californians are serious about high-speed rail and the benefits it will provide. Recently, the Authority received letters from several engineering firms applauding the Governor's vision of using cap and trade proceeds as a continuous funding source for the project, and telling legislative leaders that the allocation makes their own investment into the project, as part of a public-private partnership, more enticing.

With these funds, the Authority can accelerate work in in Southern California, enabling us to build the initial operating section, concurrently, from north to south, and south to north. This would accelerate benefits to the Los Angeles region and allow for the earlierconnection of our system with the proposed Xpress West line from Las Vegas.

Nothing worth doing was ever accomplished without challenges. High-speed rail is a programme that fits California's history as world leader in bold thinking and innovation, and is a programme my team and I will work with all our energy to bring to this state.



Jeff Morales is the Chief Executive Officer of the California High-Speed Rail Authority and has a distinguished record of experience managing large and complex transportation issues and projects. As the former Director of the California Department of Transportation, Jeff managed a \$10 billion programme and more than 23,000 employees working to build, maintain and operate the largest state transportation system in the U.S. Jeff most

recently was Senior Vice President of Parsons Brinckerhoff and is the past Executive Vice President of the Chicago Transit Authority.