
Brian P. Kelly

FROM THE CEO

Nothing worth doing is easy.

Building the nation's first truly high-speed rail system is certainly not easy. But it is not only worth doing, it is in California's interest to maintain its position as a global leader when it comes to economic standing, efforts to combat the effects of climate change and building world-class infrastructure to ensure Californians can move efficiently and effectively even as the state's population grows toward 50 million people.

The voters of California who approved the development of an electrified high-speed rail system connecting Northern and Southern California through the Central Valley got it right. This project will transform and improve the way Californians move for generations to come. And it remains an exceptional value:

- The high-speed rail system we are building between San Francisco and Los Angeles/Anaheim will cost about half as much as it would cost to achieve roughly equivalent mobility benefits through expanding highways and airports—and high-speed rail is much more sustainable;
- The mobility benefits achieved by completing the electrified high-speed rail system are unparalleled, reducing the time it takes to travel by train today from 12 hours—or by car from 7 or 8 hours—between the Bay Area and Southern California to under 3 hours by fast, electrified rail. For Californians, the system would virtually shrink the state, turning regions into Megaregions and expanding options for where people can live and work, or where companies can conveniently locate facilities, offices or other job centers.
- By 2040, the system will carry some 40 million riders and produce some $4.5 billion in farebox revenue each year, easily covering costs of operations.
- Completing the Phase 1 system, connecting San Francisco to Los Angeles/Anaheim through the communities of the Central Valley, will expand project employment by more than 600,000 job-years and produce some $131 billion in economic output.
- At full operations, the reduction of greenhouse gas emissions from the system is the equivalent of removing 400,000 vehicles off the road, avoiding the consumption of 213 million gallons of gasoline and removing more than 3,500 tons of harmful pollutants from the air—each year.

California is the national leader in transforming transportation to meet mobility, environmental and economic goals. This achievement is not by accident.

Years of policy development and investment have positioned California as the national leader

in transforming our transportation system from a fossil-fuel dependent system to one moving toward electrification. In high-speed rail's case, our zero-emission electric trains will be powered by renewable energy. Through policy development at the California Air Resources Board (CARB) and deliberate funding proposals approved by the legislature, from the state's Cap and Trade program to the recently-enacted SB 1 (legislation that made the largest investment in public transit in the state's history), California is marching toward an electrified transportation system in vehicular travel, in public transit, and in passenger rail service. This transformation is happening, considerable progress is being made, and now is not the time to turn back.

The High-speed rail project in California commenced with the approval of Proposition 1A in 2008. That ballot measure, approved by two-thirds of the legislature and 53 percent of the voters, set the mission for the California High-Speed Rail Authority:

> **"To initiate the construction of a high-speed train system that utilizes an alignment and technology capable of sustained speeds of 200 miles per hour or greater."**

Proposition 1A provided $9 billion to commence the project, estimated at the time to cost $45 billion to complete. The bond measure, therefore, provided 20 percent of the estimated cost of the project. Voters approved the bond measure expecting the state to match the bond funds with other funding—state, local, federal and private. In the nearly twelve years since the bond bill passed, those bond funds have been matched:

- $3.5 billion in federal funds;
- $8.7 billion to $11.4 billion in Cap and Trade funds through 2030; and
- $2 billion in other matching funds for bookend and other shared-corridor projects.

In 2020, for the first time, we see the emergence of private-sector interest in electrified high-speed rail in California with the promise of the $5 billion Virgin Trains project from Las Vegas, Nevada to San Bernardino County.

Between now and 2030, the Authority has a budget of between $20.6 billion and $23.4 billion to advance the program. The range reflects the ebb and flow of the Cap-and-Trade auction market. At the low end, we assume Cap-and-Trade provides the Authority with $500 million per year, and at the high end, we assume Cap and Trade provides $750 million per year. Since the enactment of AB 398 (Statues of 2017), the legislation that extended the Cap and Trade program to 2030, the Authority is receiving about $740 million annually for project development.

While this amount of funding is considerable, it is not enough to build the entirety of the Phase 1 High-speed rail project connecting San Francisco-Los Angeles/Anaheim—not based on 2020 cost estimates nor on cost estimates from 2008, when the bond bill originally passed. However, our budget is sufficient enough to advance the mission the voters gave us when they passed Proposition 1A and to continue to make important investments in all three regions of the state. With the estimated funding we have committed to this project between now and 2030, we will:

1. Complete the 119-mile Central Valley construction segment and lay track pursuant to our federal funding grant agreements with the Federal Railroad Administration;

2. Expand the 119-mile Central Valley segment to 171 miles of operable electrified high-speed rail connecting Merced-Fresno-Bakersfield, three of the fastest growing areas in California;
3. Commence testing of electrified high-speed trains by 2025 and put those trains in service by 2028-29;
4. Environmentally clear all segments of the Phase 1 system between San Francisco and Los Angeles/Anaheim in the next 18-24 months;
5. Complete the "bookend" projects we have committed funding to in Los Angeles and the Bay Area—projects valued at more than $3 billion;
6. Pursue additional funding opportunities to prospectively "close the gaps" and expand electrified high-speed rail service to the Bay Area and Los Angeles/Anaheim.

The fact is electrified high-speed rail is advancing in all three regions of California—the Bay Area, Central Valley and Southern California. In 2020, 350 miles of electrified high-speed rail is moving toward construction:

- 51 miles of electrified commuter rail service between San Francisco and San José;
- 171 miles of the nation's first truly high-speed service in the Central Valley; and
- 130 miles in Southern California connecting Las Vegas, Nevada and San Bernardino County in California.

Environmentally clearing the entire Phase 1 system between San Francisco-Los Angeles/Anaheim over the next 18-24 months is an important milestone. This achievement will enable the Authority to advance design and conduct important pre-construction activities, such as right-of-way acquisition and utility relocations. It will also enable us to further refine our cost estimates and pursue funding to close the gaps between the Central Valley, the Bay Area and the Los Angeles Basin.

Over a decade ago the federal government selected the Central Valley as the place construction would commence for high-speed rail in California. It did so by choosing this location for a $2.5 billion federal grant under the American Recovery and Reinvestment Act (ARRA) in 2009. A year later, in the FY 2010 Appropriations bill, the Authority received another grant of $929 million to construct the first 119-miles of high-speed rail between Madera and Poplar Avenue, an orchard area about twenty miles north of Bakersfield.

We broke ground in 2015 and construction is advancing today on this initial construction segment, with three Design-Build Joint Venture firms dispatching more than 3,200 workers to the construction sites. More than 500 small businesses, mostly from California, have added their expertise to the job, and the economic impact from the investment to date well exceeds $8 billion.

Notwithstanding the clear economic benefits associated with this initial investment, the initial construction segment, with a southern terminus in orchard fields north of Bakersfield, has been criticized by project opponents as a "train to nowhere." We first took on this criticism by proposing, in our 2018 Business Plan, to extend the Silicon Valley to Central Valley segment from San Francisco all the way into Bakersfield, acknowledging this stretch as our highest ridership and revenue option for Silicon Valley to Central Valley service. In 2019, working closely with the community in Bakersfield, we environmentally cleared the 18-mile alignment to get us from Poplar Avenue into the city of Bakersfield.

In our 2019 Project Update Report, we recommended extending the 119-mile stretch in the Central Valley to a 171-mile line connecting Merced, Fresno and Bakersfield for early interim service. This was after our Early Train Operator (ETO), DB Engineering & Consulting USA, confirmed that there would be important mobility, environmental and financial benefits to the state and region by building and opening this line for service. Our recommendation was also based on our conclusion that this line can be delivered with currently available funding. Subsequently, the Board of Directors Board prudently requested two additional analyses on this proposal, one from our financial advisor, KPMG, and the other from our ETO.

Based on the results of these studies, which are summarized in Chapter 3 of this Draft 2020 Business Plan, we affirm our recommendation to extend the Central Valley Segment to 171miles connecting Merced, Fresno and Bakersfield. We have performed due diligence on this approach; three separate analyses conducted by two different entities recommend proceeding with this investment and delivering the first operational high-speed rail line in America, providing key mobility, economic and environmental benefits to California and to the region where it all began, the Central Valley. Some of the key findings of these studies include:

- **Economic benefits -** Merced to Bakersfield interim service will generate significant economic benefits, with the $20.4 billion capital program projected to generate about $38 billion in total economic activity and over 200,000 job-years of employment.
- **Mobility benefits -** High-speed train service will unlock mobility benefits by providing faster service (shaving travel time by 90 to 100 minutes), more than doubling service frequency, and enhancing connectivity to other passenger rail systems – more than doubling passenger rail ridership in the corridor.
- **Environmental benefits -** With faster, more frequent electrified high-speed train service, many people will shift from driving to trains which results in reduced greenhouse gas emissions and other pollutants, improving air quality in the Central Valley.

Because of these myriad benefits, and because the Merced to Bakersfield line will be environmentally cleared this year, we continue to recommend developing the 171-mile alignment for early interim service. The Board's adoption of this plan will enable the Authority to immediately begin the necessary pre-construction work toward Merced and Bakersfield, including further advancing design, acquiring right of way, and developing a strategy for utility relocations—all prerequisites to begin construction on these extensions.

Although the ETO's analysis concludes that the best use of funds that are available and dedicated to high-speed rail is to complete the Merced-Bakersfield segment for early passenger service, the Authority in no way diminishes the value of commuter rail improvements planned in the Bay Area or Southern California. We have been a strong funding partner for projects in both regions—$1.6 billion in the Bay Area and $1.3 billion in Southern California—and we will continue to be a full partner in the development of capital improvements necessary to develop the corridors our systems will share as electrified high-speed rail expands statewide. Moreover, as noted, we will continue to environmentally clear shared corridors in both regions so that investments can be made that will benefit these regional services in the short term and benefit high-speed rail when our service arrives in those corridors.

As Governor Newsom concludes his first year in office, there has been dramatic change here at the Authority. We welcomed four new board members and an almost entirely new executive management team, including a new Chief Financial Officer, Chief Counsel, Director of Engineering, Chief of Strategic Communications, Director of Real Property, Director of Legislation, and Director of Planning and Sustainability, just to name a few. We are adding on greater capacity in 2020.

Also, working off the recommendations made by the California State Auditor in November 2018, we have undertaken a division-by-division review of the roles of state staff and consultants to ensure the form of the organization meets its function.- The governor placed an emphasis on transparency, accountability and performance here at the California High-Speed Rail Authority, and we are doing business dedicated to those principles. As described in Chapter 2, this new direction and these changes are yielding positive results.

It's true that nothing worth doing is easy. However, when the mission is clear and the team is dedicated to getting the work done, small achievements build on one another, progress occurs, and delivering on the vision becomes inevitable. There is a lot of work left to do, but in 2020 we are delivering the vision of the first true high-speed rail system in America right here in California, just as the voters asked us to do.

Brian P. Kelly
Chief Executive Officer