Chapter 1
California High-Speed Rail: A Transformative Investment in California’s Future

Jeff Morales
California High Speed Rail Authority, USA

ABSTRACT

California has started construction on the first true high-speed rail system in the United States. In this chapter, the CEO of the California High-Speed Rail Authority describes how the state’s historic investment in new high-speed rail infrastructure will benefit Californians. Benefits include job creation, statewide modernization of existing local rail lines, short and long-term reductions in greenhouse gas emissions, preservation of agricultural land and environmentally sensitive habitats, advanced clean and green construction practices and technologies, a commitment to 100% renewable energy use, and assistance to partner cities on transit-oriented planning for high-speed rail station areas.

INTRODUCTION

With the official groundbreaking ceremony having been held on January 6, 2015 and construction currently underway, California continues to lead the country in its effort to bring high-speed rail to America. California’s high-speed rail system, which will initially connect San Francisco to Los Angeles, before adding on sections

DOI: 10.4018/978-1-5225-0102-2.ch001
to San Diego and Sacramento, will usher in an era of clean transportation and economic growth for the state’s economic hubs and fastest growing regions. California as a state is perfect for a modern high-speed rail system. The state’s population is projected to grow beyond 50 million people by 2050 – an increase of over 30% from the state’s current 38 million (California Department of Finance, n. d.).

Demographically, California has seen a shift in how people view public transportation, with Millennials showing a preference for alternative sources of transportation such as high-speed rail instead of traditional interstate travel options like cars and planes. Geographically, California’s high-speed rail system is bookended by two major metropolitan population centers (San Francisco Bay Area and Los Angeles/Anaheim) and an alignment that connects millions of Central valley residents to these centers. This connectivity via high-speed rail will serve to further the environmental and economic development goals of the state while connecting people, services, and goods. All these benefits are made possible through the most ambitious and needed infrastructure program in the country.

California has seven of the nation’s ten most polluted cities in terms of air quality (American Lung Association 2013). The state also has six of the 30 most congested traffic areas in the United States as well as the country’s busiest short haul air market – Los Angeles to San Francisco Bay Area. One in five (20 percent) flights between Los Angeles to San Francisco is delayed by about an hour, which is about the same amount of time it takes to fly from airport to airport. High-speed rail in California can help those problems. If California were to follow the same infrastructure funding formula that America has used for the past 50 years, the price tag would be twice as much as high-speed rail, and require over 4,300 new highway lane miles, 115 additional airport gates, and four new runway terminal. The cost to California if it were to stick with the status quo of more roads and airports/runways would be an estimated $158 billion in construction alone, with another $133 billion in operations and maintenance over the next 50-years. With high-speed rail in place, California can reduce congestion on highways and in airports; help improve air quality to meet the state’s landmark greenhouse gas reduction goals; push the envelope in terms of the most cutting edge, environmentally sound construction practices and land-use mitigation solutions; and put thousands of people back to work, especially in the Central Valley, where the recession caused unemployment numbers to double the state’s average.

**BACKGROUND**

California’s pursuit of a high-speed rail system started three and a half decades ago, in 1981. At that point, California looked into a Southern California high-speed rail...
Competitive Advantage
(2013). Implementing IT Business Strategy in the Construction Industry (pp. 24-45).
www.igi-global.com/chapter/competitive-advantage/78006?camid=4v1a