



## **California High-Speed Rail** **BRIEFING: February 17, 2022 Board Meeting Agenda Item #02**

**TO:** Brian Kelly, CEO  
**FROM:** Brian Annis, Chief Financial Officer  
**DATE:** February 17, 2022  
**RE:** 2021 Economic Impact Analysis

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### **Background**

Since 2017, the High-Speed Rail Authority (Authority) staff has produced annual Economic Impact Analysis reports that estimate the economic impacts of planning and constructing the high-speed rail system. The first California High-Speed Rail Economic Impact Analysis (2017 Analysis) estimated the economic impact of the Authority's expenditures over a ten-year period (July 2006 through June 2016), and became the base upon which the Authority would build off annually going forward. Each subsequent fiscal year, the Authority has produced an updated Economic Impact Analysis. The 2021 Economic Impact Analysis (2021 Analysis) builds on the previous data to include fiscal year 2020-21 data.

The 2021 Analysis illustrates the economic benefits of the high-speed rail program on a countywide, regional, statewide, and national level. The scope of this analysis is primarily limited to the economic impacts from historical project expenditures. Projected impacts by Project Segment are also included in this analysis that estimates the anticipated job-years, labor income, and economic output of project expenditures upon completion of Phase 1. It does not attempt to quantify the many long-term benefits and impacts associated with future rail operations, such as increased accessibility, reduced vehicle miles traveled and vehicular congestion, increased transportation safety, greenhouse gas emission reductions, and other benefits.

### *Methodology*

The range of economic impacts are estimated using multiple industry-standard approaches that lead to a customized geographic economic impact modeling using economic the modeling software IMPLAN.

To confirm this methodology and its assumptions, the Authority has previously received review and validation from multiple industry experts both within and outside of state government who reviewed inputs, assumptions, methodology, and outputs associated with the 2017 Analysis. The reviewers confirmed the validity of the models and assumptions used and provided valuable feedback which was incorporated into the reports. These reviews included experts from the University of the Pacific's Center for Business and Policy Research, the California High-Speed Rail Peer Review Group, the Department of Finance, and the

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Employment Development Department. Since the same general methodology was followed for the subsequent update analyses, the expert validation remains applicable.

## **Discussion**

The Analysis presents the economic impacts in terms of:

- *Direct impacts* - the economic effects generated by direct spending on a project.
- *Indirect impacts* - the economic effects that occur in the next step in the supply chain (dispersed among the industries that supply intermediate goods and services to firms with direct impacts).
- *Induced impacts* - are the economic effects that result when income earned by direct and indirect employees gets spent elsewhere in the economy.
- *Job-years* - represent a combination of total jobs and the length of time of those jobs. For example, one job supported for five years equals five job-years; five jobs supported for one year also equals five job-years.

As shown on the table below, the Authority's \$8.55 billion in program investments from July 2006 to June 2021 has supported total direct, indirect, and induced jobs ranging from 64,400 to 70,500 and generated \$12.7 billion to \$13.7 billion in economic activity.

### **Cumulative California Economic Impacts, July 2006 – June 2021\***

<b>Impact</b>	<b>Job Years</b>	<b>Labor Income</b>	<b>Economic Output</b>
<b>Direct</b>	29,800 – 32,500	\$2.6B - \$2.8B	\$6.2B - \$6.8B
<b>Indirect</b>	15,600 – 16,900	\$1.2B - \$1.3B	\$3.1B - \$3.3B
<b>Induced</b>	19,100 – 21,200	\$1.1B - \$1.2B	\$3.3B - \$3.6B
<b>Total</b>	<b>64,400 – 70,500</b>	<b>\$4.8B - \$5.2B</b>	<b>\$12.7B - \$13.7B</b>

*\*Totals may not sum due to rounding*

Most of this economic activity has taken place in the State of California, with 99% of 2020-21 investment expended to companies and workers in the state. For 2020-21 specifically, the job years of employment was 10,100; the labor income was \$840 million, and the economic output was \$2.2 billion.

Program investments have already had significant positive impact on the Central Valley economy, generating an estimated 29,600 job years of employment and about \$5.42 billion in total economic activity from July 2006 to June 2021. The Sacramento region also shows significant impact because of direct Authority expenditures at its Sacramento headquarters and other government spending, with 12,650 total job-years and \$2.09 billion in total economic output. The Bay Area and Southern California regions show significant impacts derived primarily from engineering and other professional service firms based there, as well as an increasing number of construction firms from those areas, with 6,440 total job-years and \$1.39 billion in economic output, and 9,200 job-years and \$1.78 billion in total economic output respectively.

Over half (56%) of the \$8.55 billion program investment in the system through June 2021 occurred in designated disadvantaged communities throughout California, spurring economic activity in these areas.

While most of the spending has occurred within California, companies from at least 41 different states have worked on the program, contributing to everything from planning and engineering to construction. Out-of-state spending has accounted for nearly \$211 million of total expenditure and includes spending across the United States as well as some expenditures for specialized services that could only be provided from experts abroad.

### HSR Project Segment Impact Forecast\*

In addition to measuring the economic impact of the annual expenditures related to Authority activities for 2020-21, the 2021 Analysis includes an evaluation of the economic impact of the total programmed expenditures for each section within Phase 1.

Project Segment	Total Employment (Job Years)	Total Labor Income (2021\$)	Total Economic Output (2021\$)
Merced to Fresno	116,000	\$9.1 B	\$23.2 B
Fresno to Bakersfield	87,000	\$6.8 B	\$18 B
San Francisco to San Jose	24,000	\$1.9 B	\$5 B
San Jose to Merced	118,000	\$9.1 B	\$25.4 B
Bakersfield to Palmdale	139,000	\$10.7 B	\$31.5 B
Palmdale to Burbank	133,000	\$10.2 B	\$29.8 B
Burbank to LA Union Station	26,000	\$1.9 B	\$5 B
LA Union Station to Anaheim	23,000	\$1.8 B	\$4.4 B
<b>Total</b>	<b>666,000</b>	<b>\$51.5B</b>	<b>\$142.3B</b>

\*Totals may not sum due to rounding

As the investment in high-speed rail infrastructure grows over time, so too will the economic effects associated with it.

### Legal Approval

The Legal Office has reviewed this item and it is in compliance with Authority policy.

### Budget and Fiscal Impact

This is an informational item on the 2021 Economic Impact Analysis, and by itself, does not have a budget or fiscal impact.

REVIEWER INFORMATION	SIGNATURE
Reviewer Name and Title: Brian Annis Chief Financial Officer	Signature verifying budget analysis:
Reviewer Name and Title: Alicia Fowler Chief Legal Counsel	Signature verifying legal analysis:

### Recommendations

This item is informational only; there are no recommended actions at this time.