



California High-Speed Rail **BRIEFING: April 21, 2020 Board Meeting Agenda Item #5**

TO: Brian Kelly, CEO
FROM: Brian Annis, Chief Financial Officer
DATE: April 21, 2020
RE: Update on the High-Speed Rail Program Economic Impact Analysis

Background

Since 2017, the High-Speed Rail Authority (Authority) staff has produced four Economic Impact Analysis reports that estimate the economic impacts of planning and constructing the high-speed rail system. The 2016 California High-Speed Rail Economic Impact Analysis (Historical Analysis) estimated the economic impact of the Authority's expenditures over a ten-year period (July 2006 through June 2016), and became the base to which the Authority would build off annually going forward. Each subsequent Fiscal Year, the Authority has produced an updated Economic Impact Analysis. The Fiscal Year 2018/2019 Analysis is now published and builds on the previous data to include the Fiscal Year 2018/2019.

The Analysis illustrate the economic benefits of the high-speed rail program on a countywide, regional, statewide, and national level. The scope of the more recent annual Analyses is strictly limited to the economic impacts from historical project expenditures that have already been spent. 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, including a "top-down" analysis applying input-output models to project expenditures to estimate impacts at the state level, and a more in-depth, "bottom-up" methodology that involved rigorous internal and external research on detailed project expenditures and customized geographic economic impact modeling using economic modeling software (IMPLAN).

To confirm this methodology and its assumptions, with the 2017 report the Authority requested review and validation from multiple industry experts both within and outside of state government who reviewed inputs, assumptions, methodology, and outputs associated with the 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 Employment

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

Prior Board Action

The Analysis presents the economic impacts (or effects) 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 \$5.7 billion in program investments from July 2006 to June 2019 has supported total direct, indirect, and induced jobs ranging from 44,700 to 50,500 and generated \$8.3 billion to \$9.2 billion in economic activity.

Cumulative California Economic Impacts, July 2006 – June 2019*

Impact	Jobs Years	Labor Income	Economic Output
Direct	20,300 – 22,900	\$1.7B - \$1.9B	\$4.0B - \$4.5B
Indirect	11,100 – 12,500	\$0.8B - \$0.9B	\$2.1B - \$2.3B
Induced	13,200 – 15,200	\$0.7B - \$0.8B	\$2.2B - \$2.5B
Total	44,700 – 50,500	\$3.2B - \$3.6B	\$8.3B - \$9.2B

**Totals may not sum due to rounding*

Most of this economic activity has taken place within the state, with 95% of spending going to contractors, consultants, and small businesses based in California.

Program investments have already had significant positive impact on the Central Valley economy, generating an estimated 18,970 job years of employment and about \$3.34 billion in total economic activity from July 2006 to June 2019. This reflects the fact that the Authority is now a project delivery organization with construction that has been escalating in the Central Valley since FY 2013-2014 with the three design-build construction contracts. The Sacramento region also shows significant impact because of direct Authority expenditures at its Sacramento headquarters and other government spending, with 10,510 total job-years and \$1.68 billion in total economic output. The Bay Area and Southern California show significant impacts derived primarily from engineering and other professional services firms based there as well as an increasing amount of construction firms from those areas, with 4,710 total job-years and \$930 million in economic output, and 5,170 job-years and \$900 million in total economic output respectively.

Over half (53%) of the \$5.7 billion program investment in the system through June 2019 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 4% 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.

As the investment in high-speed rail infrastructure grows over time, so too will the economic effects associated with it. The table below shows the economic analysis of the completion of future phases of the project.

Future Cumulative Economic Impacts

Alignment Section	Jobs Years	Labor Income	Economic Output
Madera to Poplar	162,000	\$11B	\$30B
Merced to Bakersfield	208,000	\$14B	\$39B
Silicon Valley to Central Valley	222,000	\$17B	\$50B
Phase 1 System	624,000	\$46B	\$131B

Legal Approval

N/A

Budget and Fiscal Impact

This is an informational item on the High-Speed Rail Program 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: Original Signed March 10, 2020
Reviewer Name and Title: Alicia Fowler Chief Legal Counsel	Signature verifying legal analysis: Original Signed March 10, 2020

Recommendations

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

Attachments

- 2018/2019 Economic Impact Analysis Technical Support Document
- 2018/2019 Economic Impact Factsheet