

UC Office of the President

Policy Briefs

Title

Who Benefits the Most from California's High-Speed Rail Project?

Permalink

<https://escholarship.org/uc/item/5n138149>

Authors

Fajgelbaum, Pablo, PhD

Gaubert, Cecile, PhD

Tauzer, Matthew, PhD

Publication Date

2025

DOI

10.7922/G289146M

Who Benefits the Most from California's High-Speed Rail Project?

Pablo Fajgelbaum, PhD, UCLA and National Bureau of Economic Research
Cecile Gaubert, PhD, UC Berkeley and National Bureau of Economic Research
Matthew Tauzer, PhD, UC Berkeley

January 2025

Issue

The California High-Speed Rail (HSR) project stands to significantly change transportation across the state, but questions remain about who will benefit most from this massive infrastructure investment. While previous analyses have focused on the aggregate economic benefits of HSR in California, we provide a more nuanced understanding of these benefits for communities across California using a spatial economic model previously developed by members of our team.¹ This model captures the direct potential travel benefits of the HSR project (such as quicker and sometimes cheaper transportation) for commuters, business travelers, and leisure travelers. It also captures wider economic benefits such as higher wages and land values stemming from greater concentration of employment in more productive areas. We examine how these benefits would be distributed across California regions and socioeconomic and income groups. By understanding the potential disparities in the impact of the HSR project, policymakers can develop complementary policies to promote more balanced economic development across regions in the state.

Key Research Findings

Urban centers, particularly in the Bay Area, receive the highest projected benefits. Urban residents are expected to receive gross benefits equivalent to 1.89% of their income, nearly double the 0.96% projected for rural residents. The San Francisco-San Jose corridor receives

the highest benefits (3.57% to 2.60% of average regional income), followed by the Stockton-Modesto area (2.12% to 2.04%). Predominantly rural areas farther from the planned route, such as Crescent City and San Luis Obispo, barely see any benefit because very few residents will use the system. Even rural areas along the planned route, such as in the Central Valley, see lower returns, raising concerns that the HSR project may inadvertently lead to uneven regional development. Important to note, these estimated benefits do not consider the costs associated with the project.²

The HSR project disproportionately benefits high-income communities. High-income communities stand to gain the most from HSR. Their average benefits amount to 2.00% of income compared to 1.49% and 1.55% of income for middle- and low-income communities, respectively. This is because higher income individuals tend to live in urban centers.

The benefits from the HSR project also vary by race and ethnicity. Asian non-Hispanic communities stand to gain the most, with average benefits equivalent to 2.30% of income, mostly due to their large representation in the Bay Area, which is projected to receive the most benefits. Black non-Hispanic communities receive average benefits of 1.85%, White non-Hispanic 1.66%, and Hispanic communities 1.58% of income. These differences are mainly due to factors such as urban versus rural residence and proximity to planned HSR stations.

Overall, the impact of the HSR project may be regressive.

High-income and urban communities stand to gain significantly more than low-income and rural communities. This regressive distribution of benefits, coupled with the urban-rural divide in economic gains, suggests that the HSR project may exacerbate long-standing socioeconomic and spatial inequalities in California.

More Information

This report is based on the paper “Political Preferences and Transport Infrastructure: Evidence from California’s High-Speed Rail” by Fajgelbaum et al. (2024). For more information about the findings in this brief or in the referenced paper, please contact Pablo Fajgelbaum at pfajgelbaum@gmail.com.

References

California High-Speed Rail Authority. Appendix B: California Phase 1 High-Speed Rail Corridor San Francisco to Los Angeles Benefit Cost Analysis Memorandum, Technical Report. California High-Speed Rail Authority, April 2023.

Pablo D. Fajgelbaum, Cecile Gaubert, Nicole Gorton, Eduardo Morales, and Edouard Schaal. Political Preferences and the Spatial Distribution of Infrastructure: Evidence from California’s High-Speed Rail, Technical Report. National Bureau of Economic Research, 2024.

Pablo D. Fajgelbaum, Cecile Gaubert, and Matthew Tauzer. Aggregate Impact of California High-Speed Rail, Technical report. UCLA Institute of Transportation Studies, 2024.

¹See Fajgelbaum et al. (2024), “Political Preferences and Transport Infrastructure: Evidence from California’s High-Speed Rail,” NBER WP 31438.

²For a benefit-cost analysis of the HSR, see the complementary report by Fajgelbaum, Gaubert, and Tauzer (2024).

Research presented in this policy brief was made possible through funding received by the University of California Institute of Transportation Studies (UC ITS) from the State of California through the Public Transportation Account and the Road Repair and Accountability Act of 2017 (Senate Bill 1). The UC ITS is a network of faculty, research and administrative staff, and students dedicated to advancing the state of the art in transportation engineering, planning, and policy for the people of California. Established by the Legislature in 1947, the UC ITS has branches at UC Berkeley, UC Davis, UC Irvine, and UCLA.

Project ID UC-ITS-2024-06-4Q | DOI: 10.7922/G289146M