



Caltrans Division of Research,
Innovation and System Information

Research



Results

Planning, Policy
&
Programming

Understanding Modal Access/ Egress for California High-Speed Rail Stations

Advancing Understanding Modal Access/Egress for Future
California High-Speed Rail Stations

APRIL 2020

Project Title:

Qualifying Passenger Rail Access
Mode Shift for High Speed Rail

Task Number: 3025

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Task Manager:

Stuart Mori,
Associate Transportation Planner
stuart.mori@dot.ca.gov

WHAT WAS THE NEED?

Numerous countries in Europe and Asia have developed High Speed Rail (HSR) systems to connect mega- regions. However, a clear majority of HSR deployments tend to be in higher-density regions with more robust public transit service and lower automobile use.

A key unanswered question is how Californians will access and egress at HSR stations.

WHAT WAS OUR GOAL?

The goal of this research was to inform Caltrans and the California High-Speed Rail Authority (Authority) of best practices to integrate HSR with existing and future modal uses (intercity/commuter/ regional rail systems, shared mobility, and active transportation modes), and planning for parking.

WHAT DID WE DO?

This research team developed a survey, focus group and expert interview protocols. Next, they conducted a literature review of key HSR stations, airports and case studies. Thirdly, they conducted expert interviews with airport and rail operators, public agencies and key stakeholders. Fourth, the team conducted a focus group in the Greater Hanford area, the site of the Kings/ Tulare HSR station. Next the team conducted surveys of Central Valley and Bay Area residents about station access/egress at the Fresno, Kings/Tulare, and San Jose HSR Stations. Finally, the team worked with Caltrans and the Authority to host a half-day stakeholder workshop to discuss policies and considerations for integrating shared mobility and other innovative and emerging modes into station access planning.



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WHAT WAS THE OUTCOME?

Focus groups and expert interviews confirmed regional differences in planning practices and among potential HSR users. Surveys and models suggested travelers in the San Francisco Bay Area and Central Valley regions may travel the same when it comes to access and egress to and from HSR stations.

Results suggested respondents preferred using single-occupant modes for all trip purposes. These results suggest that de-emphasizing or restricting access to stations by single-occupant modes, either via parking location, pricing, or other means, may influence traveler modal choices.

WHAT IS THE BENEFIT?

Understandings from this project will assist Caltrans and the Authority to guide investment and design decisions that support first-and last-mile connections, enhanced connectivity, and seamless accessibility from trip origins to trip destinations.

LEARN MORE

<https://doi.org/10.7922/G2SN076K>

IMAGE



Image 1: Illustration of Future High-Speed Rail Station