



Caltrans Division of Research,
Innovation and System Information

Research

Notes

Planning
Policy
Programming

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Project Title:
International Lessons for Promoting Transit
Connections to High-Speed Rail Systems

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Promoting Transit Connections to High-Speed Rail Systems

The study will utilize international best practices to do a transit connectivity analysis based on the population sizes of three selected California HSR stations/communities.

WHAT IS THE NEED?

Intercity and High-Speed Rail Services provide trunk line rail service between major cities and, in some cases, rural activity centers. The success of these trunk line services rests on their quality, frequency and reliability, however, they are also dependent on the quality and the amount of connecting linkages established at stations and major terminals with other modes of transportation. This creates a connected transportation system and the connectivity attributes of the High-Speed and Intercity Passenger rail lines is crucial for their success. In each local community the ability to feed and distribute riders safely, efficiently and quickly will make the entire system more attractive and result in the maximum number of riders.

As California has begun to plan for and soon construct its own HSR Service, the understanding of how trunk line services may be utilized to increase HSR ridership is crucial to the long-term viability of the high-speed service. How communities and transit providers have developed these connected systems abroad is knowledge that California may be able to replicate in creating more efficient and interconnected rail systems.

WHAT ARE WE DOING?

The consultant proposes that benchmarks by population size of connections provided to high-speed and intercity passenger lines throughout the world be developed through a thorough internet based research of the available information on connectivity on high-speed systems currently operating throughout the world. Based on this research, benchmarking will be done by population size categories to develop a connectivity model that reflects current decisions made and services provided.



DRISI provides solutions and knowledge that improves California's transportation system

The web-based bibliographical review will be done to define the optimum HSR feeder systems for the various sized communities. Using formal case study comparison procedures, the research will then apply international best practices to identify the optimum feeder systems for each population size served.

Three of the twenty-six (26) California High-Speed Rail stations of differing population sizes have been selected for connectivity analysis. Detailed case studies will be done on the selected stations three of California's 26 high-speed rail (HSR) station-designated communities representing three different population sizes. The research will then determine what each community is now doing to prepare to provide connections to the new High-Speed Rail station or terminal. The team will develop a standard survey research instrument that will be completed by in-person interviews with the metropolitan planning area and transit agency leadership of the three case-study HSR communities.

WHAT IS OUR GOAL?

The end product will be an analysis of 3 HSR stations in California (Gilroy, Fresno and Los Angeles) as they relate to their connectivity to other rail and transit systems, given the communities population. This evaluation will assist transportation planners in developing HSR stations that can potentially maximize ridership and intermodal connectivity.

WHAT IS THE BENEFIT?

The project will document feeder systems in use on similar High-Speed Rail systems to optimize connectivity with urban transport systems and provide guidance to planners, elected officials and project sponsors on the development of feeder systems in American high-speed rail projects. By raising the connectivity issue to a large number of decision-makers, planning for quality connections will be enhanced and expedited and more attention will be given to connectivity at all levels of government and public transportation service management.

Caltrans' Division of Rail and Mass Transportation (DRMT) manages and coordinates statewide intercity passenger rail service known as "Amtrak California" that helps to improve the state's air quality and reduce highway congestion and fuel consumption. The potential enhancement of the high-speed rail system, existing passenger rail lines and other transit modes would be of significant value to Caltrans in offering the traveling public the potential for more attractive and efficient passenger travel options.

WHAT IS THE PROGRESS TO DATE?

As of March 2015, the project is 98 percent complete. The Web-based data collection and analysis has been completed, as well as the development of interview protocols and interviews with selected participants for each station/city. The Final Report outline was developed in December 2014 and the project is planned to be completed by April 30, 2015. At this time final editing and completion of the introduction and conclusions is underway.