

## How to Have Intermodal Connectivity at US High-Speed Rail Stations

*Free Mineta report is valuable for planners, cities, designers.*

**San Jose, CA – July 28, 2015** – What key elements can help the US high-speed rail (HSR) system blend successfully with existing rail and transit services? That question is critically important now that HSR is under construction in California. To benefit from the expertise of other nations, a research team from the [Mineta Transportation Institute](#) (MTI) has produced a report, [Promoting Intermodal Connectivity at California's High Speed Rail Stations](#). It analyzes the experiences of Spain and Germany and applies them to the new California system, although it is valuable for other states, too. Principal investigator was Anastasia Loukaitou-Sideris, PhD. The report is available for free download at <http://transweb.sjsu.edu/project/1209.html>

“One of HSR’s biggest advantages over air travel is that it offers a one-seat ride into the center of major cities without lengthy airport transfers and wait times,” said Dr. Loukaitou-Sideris. “It also provides opportunities for intermodal transfers at these locales. So, HSR passengers can arrive at stations only a short walk or transit ride from central business districts and major tourist attractions without the stress of driving through traffic congestion.”

For a successful HSR and intermodal network, the following recommendations for addressing spatial and operational issues can be drawn from the German and Spanish case studies:

- The European examples that were studied do a good job in considering four spatial zones: the station, the station neighborhood, the municipality at large, and the broader region. These four zones should be considered in planning and designing the California stations.
  - At the *station scale*, give attention to the facility’s aesthetics and functionality.
  - At the *station neighborhood level*, minimize barriers created by tracks and station infrastructure, and integrate to the surrounding urban fabric and street network.
  - At the *municipality level*, emphasize station connectivity via public transit and/or metro with the city’s important destination points.
  - At the *regional level*, consider the station’s complementarity with neighboring stations along the HSR line when determining desirable land uses around the station.
- Coordinate and collaborate with multiple parties from the beginning of the planning process.
- Identify and resolve real property interests among operators.
- Consider the HSR’s level of connectivity and intermodality with other travel modes.

Using a blended rail network, in which HSR and conventional rail may use the same tracks, at least on part of the line, offers additional advantages. For example, the amount of right-of-way space is significantly reduced; construction costs are reduced by using existing tracks; stations and facilities can be shared; platforms can be shared, etc.

Challenges of a blended network include addressing the different speeds of each train type; coordinating the different technologies; solving the issue of which train type should have priority on the rail line, etc.

For this study, the researchers interviewed European experts and analyzed the success factors at a variety of HSR stations, including Hannover Main, Berlin Central, Kassel Wilhelmshöhe, Madrid Puerta de Atocha, Zaragoza Delicias, Cordoba Central, Erfurt Main, Lleida Pirineus, and others.

Additionally, the authors conducted two case studies of multimodal transit stations in Southern

California that are likely to host HSR services in the future—Union Station in Los Angeles and the Airport Train Station and Regional Intermodal Transportation Center (RITC) in Burbank.

The full report includes 112 illustrations, including photos of various stations, map locations, design renderings, aerial views, station layouts, interior views, and more. Ten tables are also included, as well as summaries of intermodal services at each station.

For a free download, go to <http://transweb.sjsu.edu/project/1209.html>

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## **ABOUT THE MINETA TRANSPORTATION INSTITUTE**

The Mineta Transportation Institute (MTI) conducts research, education, and information transfer programs regarding surface transportation policy and management issues, especially related to transit. Congress established MTI in 1991 as part of the Intermodal Surface Transportation Efficiency Act. MTI won national re-designation competitions in 2002, 2006 and 2012. The Institute is funded through the US Department of Transportation, the US Department of Homeland Security, the California Department of Transportation, and public and private grants. The internationally respected members of the MTI Board of Trustees represent all major surface transportation modes. MTI, the lead institute for the nine-university Mineta National Transit Research Consortium, is affiliated with San Jose (CA) State University's College of Business. Visit [transweb.sjsu.edu](http://transweb.sjsu.edu)

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