

<b>UTC Project Information</b>	
Project Title	Modal Shift and High-Speed Rail: A Review of the Current Literature
University	San José State University Mineta National Transit Research Consortium
Principal Investigator	Peter Haas, Ph.D.
PI Contact Information	Mineta Transportation Institute San José State University 210 N. Fourth St., 4 <sup>th</sup> Floor San Jose, CA 95112 Peter.Haas@sjsu.edu 408-924-5691
Funding Source(s) and Amounts Provided (by each agency or organization)	Research and Innovative Technology Administration University Transportation Centers Program (\$5,000)  California Department of Transportation Office of Research—MS42 (\$25,000)
Total Project Cost	\$30,000
Agency ID or Contract Number	DTRT12-G-UTC21
Start and End Dates	May 2014 – June 2014
Brief Description of Research Project	<p>This report provides a review of scholarly literature with direct relevance to the topic of modal shift and high-speed rail (HSR). HSR systems are usually planned on the expectation that they will attract riders who would have chosen other modes (such as air, automobile, bus, etc.) had the HSR not been created. Identifying and measuring the actual ability of HSR to effect modal shift is therefore critical. This report examines the evidence concerning HSR and modal shift in both secondary analyses of previous studies and in newer studies that use primarily original data. The studies that were reviewed comprise a large variety of HSR systems, time periods, data sources, and means of analysis.</p> <p>Although this literature is still in a formative stage, with key pieces of data and analysis still unavailable, the existing research is quite clear that HSR is extremely competitive with other modes. This finding emerges from essentially every study examined for this report and is reflected in outcomes from the HSR systems of Europe and Asia, with limited information from the US. The convergence of these multiple sources and analytic frameworks on similar results provides a reasonably secure basis for inferring that new HSR systems placed in appropriate travel corridors and managed well are likely to result in significant amounts of modal shift. Essentially, the literature affirms that HSR has resulted in</p>

	<p>significant-to-dramatic mode shifts where it has been systematically evaluated.</p> <p>The most extensive and convincing information concerns HSR versus airline service. In both Europe and Asia, air service for specific routes was reduced, or even curtailed altogether, following coverage of the same routes by HSR. When HSR is faster from beginning to end of a trip, HSR gains market share rapidly and decisively. HSR market share also grows when time to access and egress the system; fare cost versus that of other modes; service frequency, service quality, and number of transfers required are compared.</p> <p>The research concerning direct competition with automobiles, expresses buses, and other modes is much less highly developed, but also points to HSR service as effectively winning market share. Although this study does not include analysis of new data that would address the California HSR system, the findings from the research reviewed here are highly consistent with the expectation that the planned HSR system is well positioned to achieve comparable modal shift.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	

Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none"><li>• Reports</li><li>• Project Website</li></ul>	Final report (MNTRC Website): <a href="http://transweb.sjsu.edu/project/1223.html">http://transweb.sjsu.edu/project/1223.html</a>