



Highlights of [GAO-09-317](#), a report to congressional requesters

Why GAO Did This Study

Federal and other decision makers have had a renewed interest in how high speed rail might fit into the national transportation system and address increasing mobility constraints on highways and at airports due to congestion. GAO was asked to review (1) the factors affecting the economic viability—meaning whether total social benefits offset or justify total social costs—of high speed rail projects, including difficulties in determining the economic viability of proposed projects; (2) the challenges in developing and financing high speed rail systems; and (3) the federal role in the potential development of U.S. high speed rail systems. GAO reviewed federal legislation; interviewed federal, state, local, and private sector officials, as well as U.S. project sponsors; and reviewed high speed rail development in France, Japan, and Spain.

What GAO Recommends

GAO recommends that the Secretary of Transportation develop a strategic vision of how high speed passenger rail systems fit into the national transportation system, and develop guidance and tools to improve the reliability and accuracy of ridership, cost, and other forecasts for these systems. The Department of Transportation (DOT) said it generally agreed with the information presented but did not take a position on GAO's recommendations. DOT said the strategic plan required by the American Recovery and Reinvestment Act of 2009 may include a vision for high speed rail.

To view the full product, including the scope and methodology, click on [GAO-09-317](#). For more information, contact Susan Fleming at (202) 512-2834 or flemings@gao.gov.

HIGH SPEED PASSENGER RAIL

Future Development Will Depend on Addressing Financial and Other Challenges and Establishing a Clear Federal Role

What GAO Found

Factors affecting the economic viability of high speed rail lines include the level of expected riders, costs, and public benefits (i.e., benefits to non-riders and the nation as a whole from such things as reduced congestion), which are influenced by a line's corridor and service characteristics. High speed rail tends to attract riders in dense, highly populated corridors, especially where there is congestion on existing transportation modes. Costs largely hinge on the availability of rail right-of-way and on a corridor's terrain. To stay within financial or other constraints, project sponsors typically make trade-offs between cost and service characteristics. While some U.S. corridors have characteristics that suggest economic viability, uncertainty associated with rider and cost estimates and the valuation of public benefits makes it difficult to make such determinations on individual proposals. Research on rider and cost forecasts has shown they are often optimistic, and the extent that U.S. sponsors quantify and value public benefits varies.

Once projects are deemed economically viable, project sponsors face the challenging tasks of securing the up-front investment for construction costs and sustaining public and political support and stakeholder consensus. In the three countries GAO visited, the central government generally funded the majority of the up-front costs of high speed rail lines. By contrast, federal funding for high speed rail has been derived from general revenues, not from trust funds or other dedicated funding sources. Consequently, high speed rail projects must compete with other nontransportation demands on federal funds (e.g., national defense or health care) as opposed to being compared with other alternative transportation investments in a corridor. Available federal loan programs can support only a fraction of potential high speed rail project costs. Without substantial public sector commitment, private sector participation is difficult to secure. The challenge of sustaining public support and stakeholder consensus is compounded by long project lead times, by numerous stakeholders, and by the absence of an established institutional framework.

The recently enacted Passenger Rail Investment and Improvement Act of 2008 will likely increase the federal role in the development of high speed rail, as will the newly enacted American Recovery and Reinvestment Act of 2009. In the United States, federal involvement with high speed rail to date has been limited. The national rail plan required by the Passenger Rail Investment and Improvement Act of 2008 is an opportunity to identify the vision and goals for U.S. high speed rail and how it fits into the national transportation system, an exercise that has largely remained incomplete. Accountability can be enhanced by tying the specific, measurable goals required by the act to performance and accountability measures. In developing analytical tools to apply to the act's project selection criteria, it will be important to address optimistic rider and cost forecasts and varied public benefits analyses.