

Role of High-Speed Rail in Interregional Travel

The May–June 2016 issue of *TR News* (No. 303, a theme issue on bus transportation) included seven articles on a bus renaissance and downplayed other passenger transport modes. The final article, written by Thomas Menzies (pp. 38–42), which summarizes *TRB Special Report 320: Interregional Travel—A New Perspective for Policy Making*, covers a much broader and more important topic: interregional travel. The chairman of this study committee was Martin Wachs.

According to the Menzies article, the report examines travel by different modes on distances of up to 500 miles, which represent more than half of intercity trips. This category of travel has experienced revolutionary growth in the past 60 years via the development of a new mode of transportation: high-speed rail (HSR). A reader might expect Special Report 320 to present an up-to-date review of the operation and construction of HSR in about 20 countries, discuss the reasons why the United States is so far behind its peers in building HSR, and suggest constructive measures to develop this new mode in many of the nation's interurban corridors.

As described by the article, however, Special Report 320 is inadequate. Presented here are several examples of the report's fundamental mistakes in defining the purpose and scope of the study; information about HSR development; comparison of different modes of interurban travel; and, particularly, conclusions and recommendations.

Degradation of the U.S. passenger railroad system was not a natural development—it was a result of national transportation policies that invested billions of dollars into highways and air transportation. Meanwhile, Amtrak is supported at the survival level. Legislation that founded Amtrak imposed the objective of self-sufficiency, which is not required for any other transportation mode. Even today, Congress forces Amtrak to work toward a minimum deficit as its goal, instead of maximum ridership. This results in astronomically expensive train fares and a failure to attract a large, latent volume of passengers. Special Report 320 does not mention this fundamental problem in transportation policy.

The committee writing Special Report 320

did not distinguish Amtrak from HSR and did not recognize HSR as a new mode of interurban transportation in the same way that jet planes are a different mode than propeller planes.

Short-, medium- and long-distance trips are not defined and the terms are used interchangeably.

The methodology for comparing different modes of interurban travel is incorrect. The major difference between traveling by HSR and by cars and buses in mixed traffic on highways—HSR features fail-safe control and offers reliability, comfort, and speeds that are approximately three times faster—is not stated clearly.

Information and data about HSR in other countries are obsolete and incorrect: the report refers to the “European and Japanese systems” as they were in the 1990s, but mostly ignores the extensive HSR projects of recent decades. Chinese HSR, which now represents more than half of HSR mileage in the world, is mentioned on only half a page, with a comment that this country is not capable of producing such national systems. This is contrary to historical examples in the United States of building national canal, railroad, and the Interstate Highway System.

The highly successful diversion of travel from airlines to HSR for distances up to 800 miles—such as in France, Japan, China, Korea, and Taiwan—receives little mention.

A negative tone about HSR penetrates the entire report, and great emphasis is placed on the incorrect claim that HSR might only be feasible for the Boston–Washington, D.C., corridor.

In the article, the section “Learning from Experience Abroad” distorts worldwide success in building HSR systems, suggesting that these were unique and risky in Europe and Japan. Successful HSR systems built since 1990—including revolutionary innovations in China—are not mentioned.

Conclusions of Special Report 320 focus on the means—the organizational aspects of planning, rather than goals—of needed modes of transportation. One conclusion is that information on travel volumes on different modes is inadequate, and that a greater effort should be made to collect it. In fact, all recent studies of economic development in the Northeast megalopolis have assumed the existence or

recommended construction of a high-capacity, high-speed transportation system between Boston and Washington, D.C. The recommendation to focus on data collection appears to be made to delay, rather than accelerate, efforts to build HSR in the United States.

As presented by the article, the conclusions of Special Report 320—that intercity buses are promising and that HSR is not, except maybe in the Northeast Corridor—are simply wrong. Any professional study using a systems approach methodology to compare the most efficient public transportation modes would follow the extremely successful HSR systems in countries such as France, China, Spain, and Japan, rather than the short-term solutions used in developing countries with buses in mixed traffic and operating on increasingly congested highways. Often, HSR systems attract so many new passengers to public transportation that buses also increase ridership as feeders to HSR.

Another fundamental weakness of Special Report 320 is that it relies heavily on extrapolation of trends, which is not planning. Planning methodology analyzes past trends to see whether they should be extended, modified, or even reversed. Planning via trend extrapolation is a common mistake in the methodology of many urban transportation planning studies.

How could such a deficient and incorrect report be produced? The list of study committee members features many persons with international reputations in highway and air transportation, but very few of them have any publications in or experience with conventional rail and, particularly, HSR.

To respond to the need for improvements of intercity transportation studies and planning intermodal interurban transportation, the author of this letter has written a paper to be submitted for publication that defines 10 major errors found in Special Report 320. A draft of that manuscript was sent to 16 persons with extensive knowledge and experience about HSR and other intercity public transport systems. Useful comments from these reviewers were incorporated into the paper.

—Vukan R. Vuchic

Emeritus Professor of Transportation Engineering, City and Regional Planning University of Pennsylvania, Philadelphia