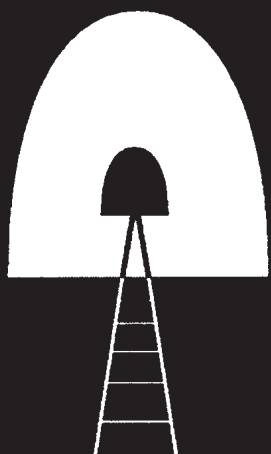


Intercity Rail Passenger Systems Update is published exclusively on the Internet. The table of contents offers links directly to each article, or you can scroll down to read the entire newsletter. Please keep your bookmark at www.trb.org/studies/publications/intercityrail.asp for upcoming editions.

The Transportation Research Board is one of six major divisions of the National Research Council, which serves as an independent adviser to the federal government and others on scientific and technical questions of national importance. The National Research Council is jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal.
www.TRB.org



CONTENTS

From the Chair

2

Editor's Introduction

3

**High-Speed Train Development in the United States:
Gauging the Approach**

4

Amtrak and Capitol Hill Update

7

**New York's High-Speed Rail Program:
Promises and Conflicts**

11

**Sharing of Rail Corridors: Building Realistic
Expectations and Partnerships**

13

**Upcoming TRB Research Projects on Shared-Use
Passenger and Freight Rail Corridors**

15

The Transportation Research Board's Committee on Intercity Passenger Rail (AR010) is concerned with research that will lead to better planning and implementation of intercity rail passenger systems, with particular emphasis on the full range of high-speed systems and new technology. Research will include demand analysis, financial considerations, economic effects (such as user and social benefits), and public-private partnerships and should address impacts on other rail operations and the environment, coordination with other modes, rail-highway interfaces, corridor versus system concerns, technology assessment, and implementation strategies.

Intercity Rail Passenger Systems Update is published intermittently by the Transportation Research Board to disseminate information about current research and development in intercity rail passenger systems. Matthew J. Melzer, editor; Anthony D. Perl, Chair, TRB Committee on Intercity Passenger Rail; Ann Purdue, TRB staff officer. Any findings and conclusions are those of the authors and not of TRB. Submit news items to Ann Purdue, Transportation Research Board, 500 Fifth Street, NW, Washington, D.C. 20001, telephone 202-334-3208, or e-mail apurdue@nas.edu.
www.TRB.org

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

FROM THE CHAIR

Dear Readers:

Like the rail mode itself, TRB's Committee on Intercity Passenger Rail has seen a tremendous growth of interest and activity in the last year. Our TRB 2010 Annual Meeting session, "New Departures in U.S. Passenger Rail Development," set an attendance record. Attendees packed the Hampton Room and surrounding hallways at the Omni Shoreham Hotel to hear Stephen J. Gardner, Vice President of Policy and Development, Amtrak; Patrick B. Simmons, Rail Division Director, North Carolina DOT; Matthew K. Rose, President, Burlington Northern Santa Fe Railway; David Bragdon, Metro Portland (now with New York City); and Joseph Szabo, Administrator, Federal Railroad Administration, discussing how—not if—the future expansion of America's passenger train operations will take place. Members and friends of the Committee on Intercity Passenger Rail are working harder than ever to meet the call for more and better passenger trains across the United States.

As 2010 is a rotation year for our membership, I would like to sincerely thank outgoing committee members for their contributions to a better understanding of passenger train performance. I would also like to welcome our new members aboard. The upcoming year will offer many opportunities to add knowledge to passenger rail innovations in America. Members and friends of the committee will bring considerable know-how to this exciting chapter in transportation development.

—Anthony Perl, Chair
Simon Fraser University
aperl@sfu.ca



At the 2010 TRB Annual Meeting, (from left) Matthew K. Rose, Patrick Simmons, Joseph Szabo, David Bragdon, and Stephen Gardner take part in a panel discussion on passenger rail in the United States. The session drew a record-setting audience.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

EDITOR'S INTRODUCTION

Shifting into high gear as trains become an area of growth, passenger rail planners are working their way through the United States' unique challenges in economic, policy, and regulatory environments. One of the greatest challenges is the safe operation of more and faster passenger trains on ubiquitous private freight railroads without jeopardizing the fluidity of freight movement or exposing freight railroads to undue legal liability—a key focus of this issue.

Moshe Givoni ponders what might be considered desired transportation outcomes in the development of true high-speed rail in the United States, and provokes thought on potential unintended consequences once high-speed trains are running.

Ross Capon provides an insightful look at the ongoing funding challenges for passenger rail and future equipment needs; the prospects for incremental higher-speed rail; the areas in which Amtrak is improving service, both in the short and long terms; and legal liability for passenger trains on freight lines.

George Haikalis recounts the historic ambitions of New York State in increasing the speed and robustness of its passenger trains and its more recent hurdles that have made further developments more difficult—namely, gaining cooperative agreements with the host freight railroad.

David Simpson then shares the salient issues driving the vital work he has performed in creating National Cooperative Highway Research Program (NCHRP) Report 657, *Guidebook for Implementing Passenger Rail Service on Shared Passenger and Freight Corridors*.

Finally, former TRB staff officer Elaine King elaborates further on the timely work of the TRB Cooperative Research Program Division to address the issue of shared use on passenger–freight corridors. This research will be essential in providing uniform guidance as new passenger trains are added along the same freight railroads whose managers predict future growth in their own core businesses.



—Matthew Melzer
mjmelzer@gmail.com

CORRECTION

In *Intercity Rail Passenger Systems Update Number 15* (Fall 2009), Tom Cornillie's piece on the Next-Generation Corridor Equipment Pool Committee cited a mandate from the Rail Service Investment Act of 2008 (RSIA) to create the committee. In fact, the committee was born out of a mandate of the Passenger Rail Investment and Improvement Act (PRIIA), which became law in October 2008. We apologize for the error and for any confusion.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

HIGH-SPEED TRAIN DEVELOPMENT IN THE UNITED STATES: GAUGING THE APPROACH

Moshe Givoni
moshe.givoni@ouce.ox.ac.uk

Moshe Givoni is Senior Researcher, Transport Studies Unit, University of Oxford, England.

High-speed train (HST) development is gaining speed across the developed world—most noticeably in China; at a comparatively miniature scale, in England, the birthplace of the railways; and in the United States. With the lingering economic recession, HST is considered an important component in long-term economic growth and in the shift to a “green,” or environmentally friendly, economy. With eyes on Europe, the United States is beginning to think seriously about passenger rail transport.

Is this good news from a transport policy perspective? What will this mean for the development of the intercity transport system, the contribution of transport to economic development, social exclusion, and the environment? What difference can it make to the dominance of the automobile, city sprawl, and the oft-used term *sustainability*? It depends: first, on the objectives for transport policy and how these align with the development of HST, and second, on the kinds of HST being built.

A look to Europe can provide some potentially important lessons and guiding principles. The most important statistic—often forgotten when talking about European railways—is the use of rail. In all 27 countries of the European Union, rail transported 384 billion passenger km in 2006. This large number accounted for no more than 6 percent of the total passenger km transported, however. HST transported 23 percent of those passenger km, up from 16 percent only 6 years earlier. If only the countries that actually operate HST are considered, the share is much higher. Still, on major transport corridors such as London–Paris and Amsterdam–Brussels, rail—HST in particular—fully dominates the market.

Mode substitution is often the main rationale for developing HST, especially substitution for air transport. Real substitution only occurs when, for example, a flight is taken off the runway and the service is provided by rail. This does not happen often in Europe. It happens only on relatively short routes of 300–400 km or when passengers are traveling to a city rather than an airport to catch a long-haul flight. When such mode substitution does happen, however, others take their place in the airplane. In practice, most substitution takes place from conventional rail to high-speed rail, with adverse implications for the former in terms of demand and investments.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)



The TGV East network brings high-speed rail to many different locations in France and Germany.
(Photo: Rail Europe)

Opting for HST over conventional rail means service to fewer cities and stations and more expensive service from which fewer people can benefit. Even with HST, aircraft and cars are the preferred or only option for too many people.

The most important and challenging elements in the design and possible benefits of a new HST line or system are the number and locations of stations. Each additional station increases the service accessibility but reduces average speed—the only speed that counts. These two factors, service accessibility and average speed, will be crucial for travelers in determining which mode to use. Fewer stops mean a faster rail journey but an overall longer access, or egress, journey. The access journey preferably should be planned based on local urban public transport; thus, such a system needs to be fully integrated into the HST station. Since one of HST's advantages is its location at the city center—where automobile access is problematic—such public transport feeder services are crucial. Otherwise, a car trip to an airport at the city's edge is far more attractive, as is simply driving for the whole trip. For the large, dispersed cities of the United States, this presents a real challenge in the effort to plan a successful HST network.

And what about the environment? HST is greener than air travel—but it does not always lead to environmental benefits. These depend on how green the electricity used is, the extent of real mode substitution, and the extent to which HST generates additional travel. In Europe, the additional travel generated by HST often is more than 25 percent.

Whether HST development can be considered positive depends on the guiding policy objective and on how HST will be integrated with the rest of the transport network—airports and public urban transport. Last, and not least, it depends on the maximum train speed. Overall, HST development must be based on accessibility and not on economic considerations; if the former are addressed properly, the latter might follow. Consideration of all of the above issues must be taken at the earliest possible stages of planning.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

Additional Resources

1. Givoni, M. Development and Impact of the Modern High-Speed Train: A Review. *Transport Reviews*, 26, 5, pp. 593–612, 2006.
2. Givoni, M. and D. Banister. Airline and Railway Integration. *Transport Policy*, 13, pp. 386–397, 2006.
3. Givoni, M. and D. Banister (eds). *Integrated Transport: From Policy to Practice*. Routledge, 2010.
4. Brons, M., M. Givoni, and P. Rietveld. Access to Railway Stations and Its Potential in Increasing Rail Use. *Transportation Research Part A*, 43, pp. 136–149, 2009.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

AMTRAK AND CAPITOL HILL UPDATE

Ross B. Capon
rcapon@narprail.org

Ross Capon is President of the National Association of Railroad Passengers.

Two metaphorical trains are in a race: for reasons familiar to most readers, the big push to expand and improve passenger train service and the growing pressure to cut federal spending—both in the face of political forces and the Obama administration's deficit reduction pledge, the administration's strong pro-train stance notwithstanding.

Train advocates see a need for a serious rail title in the next surface transportation law. Sensible transportation investments must be made regardless of revenue source, taking future needs into account—including the dim future of short-distance air service and rising energy prices.

For Amtrak, Fiscal Year 2010 was another record-breaking year—the railroad handled 28.7 million passengers, an increase of 5.7 percent from FY 2009. This is a reminder that the public wants more, and better, passenger trains. With gains posted every year from 2003 to 2008, Amtrak now can point to year-over-year increases in 7 of the past 8 years. An Amtrak release noted that long-distance train ridership rose 6.6 percent, state-supported and other short-distance routes rose 6.5 percent, and Northeast Corridor use was up 4.3 percent.

Reality does not quite match the popular image that Amtrak should be “in clover” because of President Barack Obama's welcome commitment to passenger train development, however. The operating budget remains as tight as ever, and the increased capital budget—including \$1.3 billion in American Recovery and Reinvestment Act of 2009 (ARRA) funds—actually increases Amtrak's operating costs.

In early February, Amtrak released its fleet strategy, finally putting on record a timetable for modernizing the fleet and modest expansion based on average annual ridership growth of only 2 percent. The projected cost averages more than \$500 million a year, and would be in addition to regular Amtrak capital grant requests, which already are higher than actual appropriations. On March 22, Amtrak submitted to Capitol Hill a \$446 million fleet addendum to its FY 2011 budget request. That brought Amtrak's total request for FY 2011 to \$2.6 billion. Since Amtrak is committed to a specific investment level for Americans with Disabilities Act of 1990 (ADA) station compliance work, the impact of any shortfall in capital funding would hit the rest of Amtrak's capital budget hard.

Led by U.S. House of Representatives Transportation and Infrastructure Committee chair Rep. James L. Oberstar (D-Minn.) and Subcommittee on Railroads, Pipelines, and Hazardous Materials chair Rep. Corinne Brown (D-Fla.), more than 100 House Democrats wrote to President Obama on April 16, 2010,

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

to urge that any surface transportation principles the Administration plans to issue “and any future surface transportation authorization proposal developed by the Administration [include] a dedicated revenue source for planning and development of high-speed rail in the United States.”

High- and Higher-Speed Rail

It seems clear that California and Florida are the only states with a serious chance of getting world-class high-speed trains within the next 10 years, but it is equally clear that meaningful improvements to existing services can attract significant ridership and revive a train-riding culture in the United States, laying the groundwork for true high-speed rail. While U.S. railroads languished for many decades, other industrialized countries continued to modernize their rail networks. Recent investments signal that the United States is beginning to get serious about catching up, step by step. The challenge is in managing expectations, however, as reporters, politicians, and members of the public unfamiliar with U.S. transportation history “discover” that universal high-speed rail in the United States is not in the cards for many years—and that this need not be seen as a tragedy, nor as a failure of Administration policy, but simply as a consequence of the fact that the United States has a lot of catching up to do.

Amtrak's *Vision for High-Speed Rail in the Northeast Corridor*, issued in September, contemplates a new, double-track Washington–Boston railroad, much of it on new rights-of-way and some serving different cities—such as Hartford, Connecticut, instead of New Haven. The report followed the June release of the *Northeast Corridor Infrastructure Master Plan*, a multiagency, multi-railroad document that considers what is needed to modernize and to modestly expand the capacity of the existing Northeast Corridor.

Service Improvements

Amtrak has signaled its interest in the long-distance network with a number of positive steps:

- Earlier, Boston–Chicago through-cars were restored to the *Lake Shore Limited* route, eliminating a forced transfer at Albany for New England passengers. More recently, full dining-car service was restored on the route.
- The *Cardinal* route regained checked baggage with the May 10, 2010, timetable change; however—at least temporarily—this included only currently staffed stations, except for Indianapolis, Indiana; Newark, New Jersey; and New York Penn.
- On December 10, 2009, Amtrak's board unanimously approved authorization for management to negotiate with Union Pacific regarding daily operation along the *Sunset Limited* route, which now has triweekly service. If implemented, there would be a daily, full-service, Chicago–San Antonio–Los Angeles train, with a connecting coach-and-lounge New Orleans–San Antonio train. At the time of publication, Amtrak and Union Pacific have yet to reach an agreement.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)



A high-speed Acela Express train crosses the Susquehanna River Bridge in Maryland. (Photo copyright James G. Howes)

Other improvements include:

- Free Wi-Fi has been introduced on Acela trains and at key Northeast Corridor stations and Amtrak is planning to extend Wi-Fi to the nationwide fleet.
- The May 10 national timetable restored full Northeast Corridor schedules, thanks to the completion of significant track work on the Amtrak-owned line.
- A third daily Raleigh–Charlotte round-trip was added June 5, 2010.
- Chicago–Detroit–Pontiac trains begin stopping at New Buffalo, Michigan, after protracted delays related to ADA station platform issues.
- An additional Richmond–Washington, D.C. extension of Northeast Regional service, funded by the Commonwealth of Virginia, began in July. The Lynchburg extension, inaugurated last fall, has proven to be very successful.

Amtrak has studied restoration of service between Salt Lake City, Utah, and Seattle, Washington, and service between Chicago and the West Coast via southern Montana and North Dakota. In accordance with PRIIA, Amtrak is implementing performance improvement plans for its 15 long-distance routes—five per year, starting in 2010. Amtrak issued the statutorily required plans for five routes this year, and for November 2011, Amtrak envisions running the triweekly *Cardinal* daily and extending its New York–Philadelphia–Pittsburgh train to Chicago by combining it with the *Capitol Limited* between Pittsburgh and Chicago.

Liability

Amtrak and the Florida Department of Transportation (DOT) are locked in controversy over an agreement between Florida DOT and CSX under which the state would acquire the line through Orlando and begin operating SunRail, a planned Central Florida commuter rail service. Amtrak also uses the line, however, and claims that its liability exposure would increase under the proposed deal, while exposure of CSX would not. The existence of SunRail and other

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

passenger train services in Florida may depend on successful resolution of this dispute. Moreover, the liability issue is getting broader—largely because of the 2008 commuter train–freight train collision in Chatsworth, California, there are House and Senate bills now that would raise the liability cap on passenger train accidents from \$200 million to \$500 million and that would apply the increase retroactively.

Amtrak's reports can be found at www.amtrak.com—click on “Inside Amtrak” at the bottom, and “Reports & Documents” at the left.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

NEW YORK STATE'S HIGH-SPEED RAIL PROGRAM: PROMISES AND CONFLICTS

George Haikalis
geohaikalis@juno.com

George Haikalis is President, Institute for Rational Urban Mobility, Inc., and Member Emeritus, TRB Committee on Intercity Passenger Rail.

In the 1970s, New York State was a leader in advancing investments in state-led high-speed rail programs. The New York City–Albany route was upgraded to 110 mph operation concurrently with the federal program to upgrade the Northeast Corridor. New York State also invested in significant improvement in rail stations along the corridor. Because basic New York–Buffalo rail service was included in the core Amtrak system, New York State did not advance operating subsidies for passenger rail service—except for the Montreal–New York service of which, in 1978, New York State was an early participant in the operating subsidy program for additional routes.

Further efforts to expand rail service west from Albany to Buffalo have remained a real challenge. Throughout the years, the owner of this busy two-track freight line—now CSX—and the state have been unable to advance an incremental upgrading of the line for higher speeds and increased frequencies for passenger trains.

CSX has resisted efforts to run trains at 110 mph on its tracks, citing safety concerns, but has agreed to upgrade to 90 mph when the now-mandated positive train control systems are introduced. Local elected officials along the “Empire Corridor” argue that 110 mph is at the lowest threshold of high-speed rail and express unhappiness with a 90-mph plan. State rail officials and the freight rail carrier have conflicting opinions on the terms of agreements that would allow this plan to proceed. To overcome this problem, New York’s most recent rail plan called for a separate third track for 110-mph operation. Efforts to gain full funding for this costly improvement from federal ARRA funds have produced limited results. An alternative—which is likely to emerge as detailed studies proceed—is to construct additional track segments at choke points in the Corridor and share the trackage with freight and passenger service.

While in time these issues will be resolved, the conflicts highlight a significant research gap in understanding the limits of joint use of rail tracks for higher-speed passenger rail and for high-density rail freight operations. To some extent this is an institutional issue: although rail freight carriers did cede authority over passenger operations to Amtrak in 1971 in return for relief from further operation of the money-losing passenger trains, did this authority include substantial increases in the scale of these services? With deregulation, the remaining government role in overseeing the irreplaceable asset of operating rail lines is less clear. The creation of the Surface Transportation Board—the successor to the Interstate Commerce Commission—has provided a new framework for rail-

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

roads to define their role in serving the public interest. The federal government, the states, and the privately owned freight railroads should cooperate in developing a mutually beneficial investment plan for the development of cost-effective rail freight and passenger services.

Perhaps there is a place for TRB-led research to shed some light on this institutional conflict.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

SHARING OF RAIL CORRIDORS: BUILDING REALISTIC EXPECTATIONS AND PARTNERSHIPS

David P. Simpson
simpsonconsult@comcast.net

David Simpson is Principal, David P. Simpson Consultants, LLC.

Recent transportation initiatives include, for the first time, significant federal funding for states to develop intercity corridor services. The sleek, modern train services in Europe and Asia that have received widespread publicity rely on dedicated or passenger-dominant track facilities. In contrast, most new passenger rail services in the United States will involve the use of existing freight rail rights-of-way for the short to medium term. In many cases, these tracks will be used in common with freight and passenger operations. In other circumstances, rights-of-way may be shared, but dedicated passenger track also may be constructed to allow higher average speeds through tighter engineering specifications, higher super elevation in curves, and new signaling technologies.

The concept for the recently published *NCHRP Report 657: Guidebook for Implementing Passenger Rail Service on Shared Passenger and Freight Corridors*,¹ was developed by members of TRB's Intercity Passenger Rail and Freight Transportation Economics and Regulation Committees. The American Association of State Highway and Transportation Officials' (AASHTO) Standing Committee on Rail Transportation championed the funding and development of this new resource document, which is of particular value to public agencies considering sponsorship of commuter or intercity passenger rail services. Following is a summary of some of the findings and suggestions from NCHRP Report 657.

- The technical challenges in infrastructure sharing are dwarfed at times by the cultural barriers that distinguish management of private freight facilities from the operation of passenger rail services. Building a foundation of understanding and trust between public and private entities is, therefore, an essential ingredient in the long-term success of shared corridor operations. This may appear to be self-evident, but it requires a commitment of resources by both sides that often is lacking at the start of a new corridor initiative.
- Public sponsors must invest time and resources into the development of a familiarity with rail freight operations; more specifically, with the host freight carrier's operation and service network. Freight carriers, for their part, must engage in public planning processes that involve rail more freely, educating public officials about freight rail's role in the local community while gaining better perspective on opportunities to leverage public rail investment.

¹ http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_657.pdf

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

- Parties should develop a long-term framework to guide development of the corridor. Public sponsors naturally may focus on getting some type of minimum service in place to test the market and to build support. The host freight carrier will fret about control of their franchise and political pressure to offer ever more capacity to the passenger operation. Each side must have the patience to engage in development of a long-term vision.

- Evolving FRA guidance on access to federal funds appropriately emphasizes the need for long-term planning. For example, track sharing may be entirely appropriate for an initial or 5-year level of service, but simply will not be cost-effective beyond a certain level of train speeds or frequency. Understanding and acknowledging the long-term limits of a given service structure helps to build confidence and flexibility in addressing shorter-term needs.

- Formal, technical assessments of capacity and service capability should be made as transparent as possible. This implies at least scoping-level justification of anticipated freight volumes by the host carriers and full disclosure of modeling inputs and outputs. Best case scenarios include 1) the passenger agency having developed a sophisticated understanding of the modeling mechanics and 2) a sense of joint ownership of the modeling results with the host freight road. This will protect the freight carrier from public accusations of greed over needed capacity investments, while defending passenger sponsors from public angst over the investment of public funds into private rail infrastructure.

In summary, the challenges in developing a successful shared-corridor operation are significant. I am fond of saying that “it is a process, not a project:” the notion of simply buying train slots for a passenger operation—and then walking away—does not work. The good news is that many highly successful shared corridor operations work very well; namely, systems in places such as Chicago, Illinois; North Carolina; and California. NCHRP Report 657 will point the way for those seeking role models to develop their own new services.



The BNSF Railway's transcontinental main line heading west from Chicago is a high-traffic shared-use corridor, also utilized by Metra commuter trains and Amtrak intercity trains.

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

UPCOMING TRB RESEARCH PROJECTS ON SHARED-USE PASSENGER AND FREIGHT RAIL CORRIDORS

Elaine King
eking@nas.edu

Elaine King recently retired after 25 years as Rail Transport Specialist, Technical Activities Division, Transportation Research Board.

Completion of the project that generated NCHRP Report 657 has highlighted the need for additional analytical tools to assist states and other public agencies in evaluating new, enhanced intercity passenger rail proposals and for more detail on capacity modeling methodologies supporting development of shared-use operations. As a result, two new research projects are intended to fill those needs:

- **Web-Based Screening Tool for Shared-Use Rail Corridors** (*National Cooperative Freight Research Program Project 30, FY 2010*). Although some states have well-established rail passenger programs through which capital and operating funds are provided, other states and regional authorities are just beginning to implement passenger rail service plans and projects. Because of the limited resources available for such projects, it is important that public agencies have a screening tool to help identify rail passenger projects warranting further investigation using rigorous analytic tools. The objective of this \$500,000 project is to develop a web-based tool that enables states and passenger rail operators to perform preliminary feasibility screening of proposed shared-use



Amtrak's Southwest Chief passes a freight train on the BNSF Railway in rural Illinois. NCFRP Project 30 will help states to screen projects for shared-use passenger and freight rail corridors. (Photo courtesy Amtrak)

ALSO IN THIS ISSUE

From the Chair



Editor's Introduction



High-Speed Train
Development in the
United States:
Gauging the Approach



Amtrak and Capitol
Hill Update



New York's High-Speed
Rail Program:
Promises and Conflicts



Sharing of Rail Corridors:
Building Realistic
Expectations and
Partnerships



Upcoming TRB Research
Projects on Shared-Use
Passenger and Freight Rail
Corridors



[Back to page 1](#)

passenger and freight rail corridor projects. The tool would assist in preliminary analysis as defined in the 2005 FRA publication *Rail Corridor Transportation Plans: A Guidance Manual*,² but is not intended to support capital budgeting or facility design beyond the conceptual level. This project is just getting under way and will be completed in approximately 21 months.

- **Capacity Modeling Guidebook for Shared-Use Passenger and Freight Rail Operations** (NCHRP Project 08-86, FY 2011). This project will develop a detailed guidebook on capacity modeling techniques for state transportation agency staff and other public entities. Capacity models often are used by freight railroads and passenger operators to identify capacity issues in a given shared-use corridor and to determine the level of track, signal, and structure improvements required to add passenger service in a manner that does not degrade freight operations. These models can simplify time-consuming negotiations between commuter agencies, freight railroads, and states operating intercity passenger rail systems.

Capacity models are complex in their application and require much data and cooperation from the host freight railroad. Experienced analysts must interpret the derived outputs from these models. Although the freight rail industry has experience with these models, most states and their consultants have not developed the expertise to understand their proper application. The models' methodology and ground rules can vary greatly depending on the consultant, the railroad, and the specifics of the corridor and proposed project. States lack a good understanding of the methodology for calibrating and applying these models to address capacity and related infrastructure issues in an equitable and public interest-protecting way, while also giving private freight railroads a reasonable incentive to enter into an agreement with a state or commuter agency as required by law. A detailed project statement for this \$500,000 project is being developed by a project panel.

Newsletter Comments

We look forward to your feedback on the format and the content of this publication. Comments on this newsletter, and most especially, continued contributions by committee members, friends of the committee, and others can be sent to the editor:

Matthew Melzer
mjmeler@gmail.com

² www.fra.dot.gov/downloads/rrdev/corridor_planning.pdf