



Railway
Interiorsexpo

15, 16, 17 November 2011

Hall 9, Koelnmesse, Cologne, Germany

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective



**Dr. Richard Rudolph,
Chair, Rail Users' Network**

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

A record 30.2 million passengers took Amtrak trains over the past 12 months. While this may seem impressive, considering how little money, creativity and leadership the United States has invested in a modern rail passenger system, U.S. passenger trains are, quite simply, a global laughingstock. Most of them travel at speeds that were common a century ago.



Source: Amtrak: 2011-2012 America



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

How did the United States get to where it is today, a country with the slowest and most threadbare, unreliable intercity passenger rail service of any advanced nation?

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

We were not always in this humiliating position. Before WWII we operated trains that amazed and impressed the rest of the world.

American Streamliner of 1950s



Photo by Chuck Bode

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective



Picture yourself aboard "The Crescent"...

Luxurious Streamliner between New Orleans and New York via Montgomery, Atlanta and Washington



NOW!
8:00 A.M. ARRIVAL IN NEW YORK
allows you ample time to keep a
morning business appointment or
spend a full day sightseeing.

*SOMETHING NEW! Afternoon "Hospitality Hour" in
dining car between New Orleans and Washington with
complimentary orange juice or coffee.*

You're sitting back pleasantly relaxed . . . sipping a light
refreshment . . . watching an ever-changing panorama of
the countryside pass by outside the wide-view picture
windows. What a wonderful way to travel!

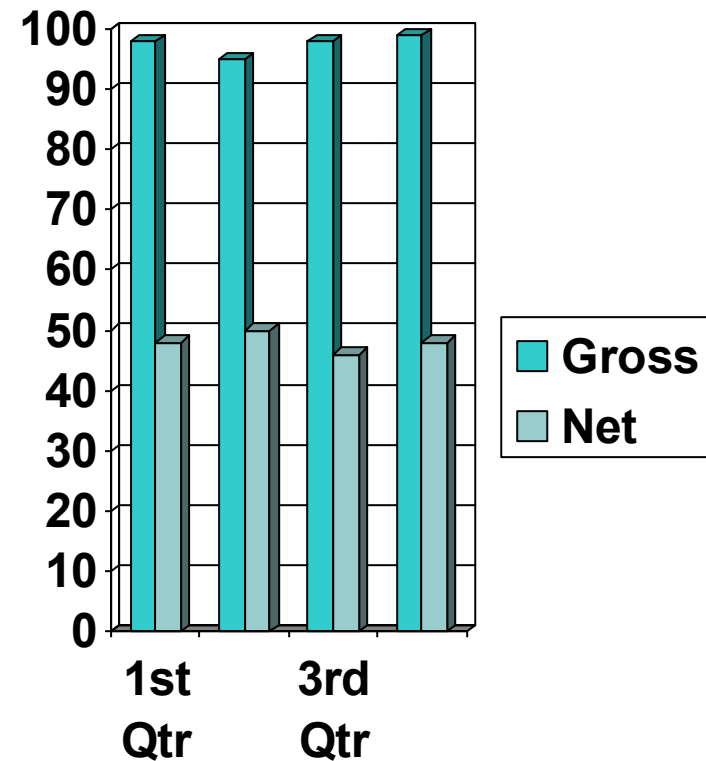
And there is more to the picture, too, for this modern
streamliner offers accommodations for every travel need:
Bedrooms en suite, Bedrooms, Roomettes, Drawing Rooms
and a Master Room with radio and shower. Excellent
dining and lounge facilities. Also reclining seat coaches
between New Orleans and Atlanta; Charlotte and Wash-
ington; coaches between Washington and New York.

SOUTHERN RAILWAY SYSTEM

The interiors of these streamliners abounded in creature comforts – wide double-paned windows, recessed fluorescent lighting, luxurious reclining seats and the first air-conditioning found in commercial transport.

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Streamliners attracted customers by the carload and actually made money. Wall Street consultants Coverdale and Colpitts surveyed 58 streamliners in 1948 and found that they grossed \$98 million and netted \$48 million after out of pocket expenses.





The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Fastest Trains in the United States

(Speed = average speed over given distance in miles per hour)

Year	Railroad	Train	Distance	Speed
1940	Burlington	Morning Zephyr	54.6	84
1941	Milwaukee	Midwest Hiawatha	60.3	77
1953	Burlington	Twin Cities Zephyr	54.6	86.2
1954	Burlington	Twin Cities Zephyr	54.6	86.2
1956	Burlington	Twin Cities Zephyr	57.7	84.4
1957	Milwaukee	Olympian Hiawatha	61.9	82.5
1958	Illinois Central	City of New Orleans	53.2	81.8
1959	Santa Fe	Super Chief-El Capitan	99.9	82.1
1960	Santa Fe	Super Chief-El Capitan	99.9	82.1
1961	Santa Fe	Super Chief-El Capitan	99.9	82.1
1962	Burlington	Empire Builder-Morning Zephyr	45.2	82.3
1963	Burlington	Empire Builder-Morning Zephyr	45.25	82.3
1965	Burlington	Empire Builder-Morning Zephyr	45.25	82.3
1966	Burlington	Morning Zephyr	45.25	84.8
1967	Pennsylvania	Afternoon Congressional	68.4	85.5
1968	Burlington	Twin Cities Zephyr	45.25	84.8
1969	Penn Central	Metroliner	68.4	95.4
1970	Penn Central	Metroliner	68.4	95.4
1971	Penn Central	Metroliner	68.4	93.3
1972	Penn Central	Metroliner	68.4	93.3
1987	Amtrak	Metroliner	68.8	98.3
1999	Amtrak	NE Direct	76.5	95.6
2001	Amtrak	Acela Express	68.8	103.2
2003	Amtrak	Acela Express	68.8	103.2
2005	Amtrak	Acela Express	68.8	103.2
2007	Amtrak	Acela Express	68.8	100.7
2009	Amtrak	Acela Express	68.8	100.7



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

American trains over 80 M.P.H. in 1954 The Complete List!

Railroad	Train	Distance	MPH
Burlington	Twin City Zephyrs	54.6	86.2
Santa Fe	Golden Gate	37.9	84.2
Burlington	"Five Trains"	57.7	82.4
Burlington	Twin City Zephyrs	54.6	81.9
Illinois Central	City of New Orleans	53.2	81.8
Santa Fe	Fast Mail	94.9	81.3
Santa Fe	Golden Gate	37.9	81.2
Illinois Central	City of New Orleans	44.6	81.1
Milwaukee	Afternoon Hiawatha	43.1	80.8
Burlington	North Coast Limited	57.7	80.5
Union Pacific	City of Denver	95.0	80.3

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

The streamliner ended in the 50's. While there were a number of factors, the most important was the passage of the Federal Aid Highway Act of 1956.

At same time, state and local governments bankrolled airport construction while Washington subsidized air carriers by fixing artificially high rates for U.S. Airmail contracts.





The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

With the expansion of the interstate highway system and air travel becoming more affordable – interest in passenger rail has all but disappeared.

By 1966, the U.S. passenger rail network was in a free-fall. Recognizing that something had to be done, Congress passed the Rail Passenger Service Act of 1970. The following year Amtrak was created to preserve passenger service in the U.S.

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

From 2,500 daily intercity trains in 1954 fewer than 500 trains were left when the National Railroad Passenger Corporation or Amtrak took over intercity rail service in 1971.



Source: www.umcyling.com

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Over the next couple of decades Amtrak struggled to stay alive, cutting additional routes leaving us with a barebone national system.

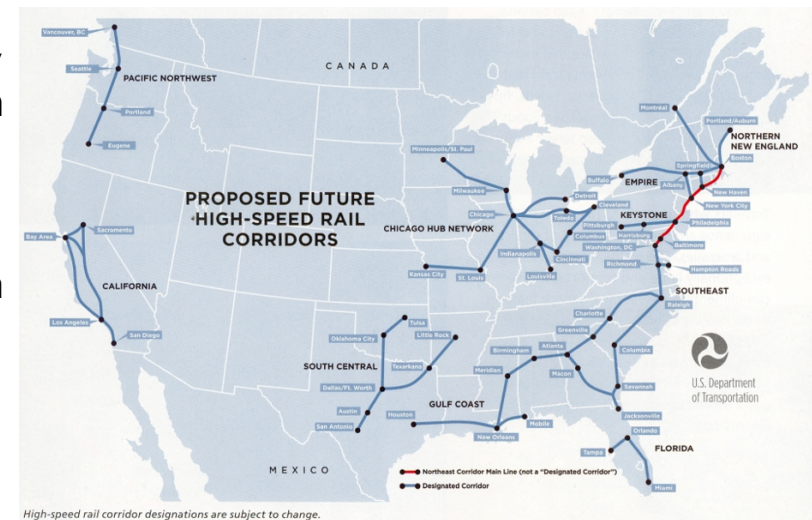


Source: Amtrak The Amtrak System

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Transit and Rail advocates were elated when Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA) in the early 1990's. The act provided authorizations for highways, highway safety, and mass transportation, with total funding of about \$155 billion between 1992-1997.

Section 1010 of the Act established a special program to fund safety improvements at highway-rail grade crossings on corridors that were designated as high-speed intercity passenger rail corridors. Since 1991 eleven high speed rail corridors have been designated as official high-speed corridors. Five were designated under ISTEA and six were authorized under the Transportation Equity Act for the 21st Century (ISTEA-21).



Source: Amtrak 2011-2012 America

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Passage of the Swift Rail Development Act of 1994 kicked off a quiet movement among various state departments of transportation. Referred to as the High-Speed Rail Act, it authorized the U.S Secretary of Transportation to provide financial assistance to public agencies to undertake corridor planning activities to establish high-speed rail service in their state.

Planning for increased passenger service along each of these corridors moved forward in the last decade, but there was no dedicated source for planning, designing, or implementing high speed rail. What was accomplished was primarily the result of individual state activity.



Source: www.amtrakdowneasterphotos.com

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Amtrak's 11 year old Acela service between Washington and Boston is positively pokey compared to France's TGV or ICE's in Germany. Acela briefly hits 150 miles per hour in Massachusetts and Rhode Island, but averages only about 85 over the full route due to track limitations and the antiquated catenary system.



Source: TGVweb (Internet)

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

President Obama



Source: <http://www.whitehouse.gov>

The election of President Obama in November 2008 put high speed rail on the fast track.

The \$787 billion stimulus package that President Obama signed into law in April 2009 included \$8 billion for fast trains in the U.S. — the most ever allocated for rail at one time.

In January 2010, the president announced the 31 states slated to receive a portion of the \$8 billion made available for high-speed rail through the American Recovery and Reinvestment Act (ARRA).



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

- A proposed Los Angeles-to-San Francisco corridor received \$2.34 billion (to add to a \$9-billion bond approved by voters in 2008).
- Among other key projects, the government allocated \$1.25 billion for a dedicated line for high-speed trains between Tampa and Orlando
- \$1.10 billion for rail improvements that would increase top speeds from 79 to 120 miles per hour between Chicago and St. Louis
- \$800 million improvements between Chicago and Milwaukee which would ultimately reduce travel time by more than 30 percent and increase maximum speeds from 79 mph to 110 mph. Eventually, passengers will be able to travel from Chicago to the Twin Cities at a top speed of 110 mph, saving time and energy compared to driving.
- \$400 million for Ohio's Cincinnati-Columbus-Cleveland (3C) route.



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Congress approved \$2.5 billion more for high-speed rail in FY 2010 appropriations and had considered at least \$1 billion for FY 2011.

As of Oct. 2011, a total of \$10.1 billion in federal funds had been provided so far to 32 states and D.C. for high-speed and intercity passenger rail; of that, more than \$7.6 billion had been obligated.



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

The future of U.S. high-speed rail is uncertain, especially given the crop of new players brought in by the historic 2010 elections. In the months following the elections, three states—Florida, Ohio and Wisconsin—voluntarily forfeited federal high-speed rail funds they had previously been awarded.

In April 2011, Congress eliminated all high-speed rail funding in FY 2011 appropriations, rescinded \$400 million of FY 2010 unobligated high-speed rail funds and reduced Amtrak capital funding by \$130 million.



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

State policymakers are continuing to weigh whether investing in high-speed, intercity passenger rail is smart public policy, and if so, how to get these projects done. The state role in passenger rail includes planning, development and funding. Only about half the states actively support passenger rail. Many—especially in the absence of a federal funding partner—have had limited or no passenger rail programs for decades.



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

\$1.2 billion in high-speed rail funds originally designated for Wisconsin and Ohio has been redirected to railway projects (high-speed and normal-speed) in 14 different states.

Wisconsin has suspended work under its existing high-speed rail agreement and the incoming governors in Wisconsin and Ohio have both rejected ARRA high-speed rail funding

Florida's high-speed rail project has also been canceled.



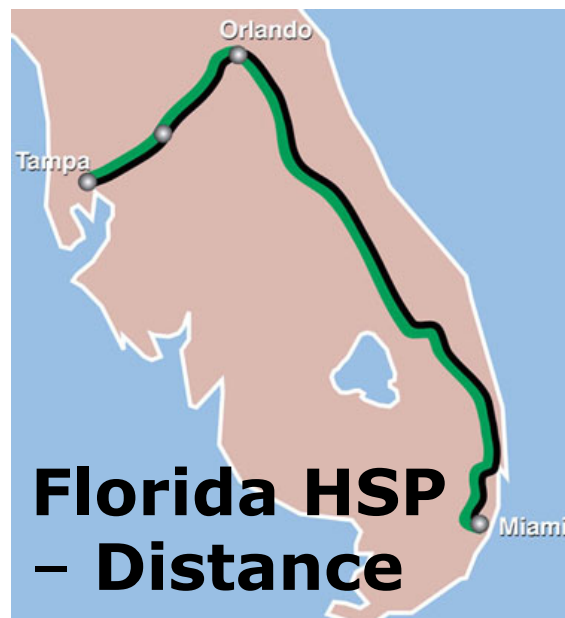
The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

What can be learned from canceled projects?

- Florida High Speed Rail
- Wisconsin High Speed Rail
- Ohio 3 C Project

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Why were these projects canceled?



Source: <http://www.fra.dot.gov/>



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Public Perception of Railroads Today



Photo by Murray Lundberg (Internet)



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

What is high-speed rail?

“Higher Speed”

90 to 120 mph

Shared ROW

Diesel or Electric

Vs.

High Speed

200 +mph top speed

Dedicated ROW

Electric

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Understanding the nature of competition

Higher speed – autos, buses



High speed – Airlines





The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Higher speed requirements:

- Faster than car or bus
- 70-80 mph average speed (Class 4-5 track)
- 90-120 mph top speed (Class 6-7 track)
- Frequency
- Convenience
- Competitive Pricing



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

What else is needed for high-speed rail?

- City pairs -200-600 miles with sufficient population density
- Business and Commercial Interest
- Infrastructure to feed passengers to HSR
- Commuter rail, subway, light rail, trolleys
- Higher speed regional rail
- Financial resources and political will

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

European High-Speed Train





The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Official Washington DC is conflicted as to the benefits of funding high-speed rail projects during an era of large budget deficits. President Obama's FY2012 budget proposed a huge \$53 billion investment in high-speed rail corridors around the country but didn't indicate how those projects would be funded.

For FY 2012, the House has proposed to again provide zero high-speed rail grant funding; the Senate bill includes just \$100 million for these projects, a far cry from the \$53 billion over six years that President Obama requested.



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

Rail advocates for far too long have been caught up in the perennial fight over the funding of Amtrak. To be sure, that has been important. So are the gallant efforts of rail advocates who have worked long and hard to expand the number of frequencies in Illinois, California, Maine and other states.

Whatever is finally allocated for high-speed rail and Amtrak during the current legislative session will not begin to address what is needed if the U.S. is ever to have a world-class passenger rail system.



The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective

We will need to spend at least \$30 billion a year to catch up with Germany, the U.K. and other European countries.

While this may seem like an enormous sum, it is nothing compared to what we spend maintaining our oil pipeline in the Middle East.

Fast, frequent, reliable, affordable customer-friendly rail passenger service would go a long way towards reducing our dangerous dependence on the automobile and airplane as our only modes of choice.

It would reduce our dangerous dependence on foreign oil, reduce traffic congestion / road rage, cut greenhouse emissions and provide a more inclusive way for our aging population to maintain their mobility.

The Hopes, Failures and Challenges of US High-Speed Rail: The Customer's Perspective



**ASSISTING RAIL
PASSENGERS TO IMPROVE
AND EXPAND SERVICE
THROUGH ADVOCACY AND
EFFECTIVE
REPRESENTATION**