

High-Speed Rail: Getting Back on Track

Special Report

Billions of bucks being disbursed by Washington make up just one part of a massive effort to update the nation's iron highways for 21st century city-to-city ground transportation. The train is just now leaving the station. Are you on board?



High-Speed Rail

The New Jersey Transit's rail and bus lines take passengers on over 223 million trips a year. Nationally, ridership has been increasing not only on high-frequency commuter lines like NJ-NYC, but also between cities like Raleigh and Charlotte.

North Carolina's main Amtrak route runs you from point A to point B in about the same time it takes to drive. And when gasoline prices skyrocketed in 2008, the 170-mile Raleigh-Charlotte route saw a 28% jump over 2007 ticket sales.

Gas price volatility is here to stay, and so is the attractiveness of rail as an option.

To commuters, rail makes more and more sense with every cent unleaded ticks upward.

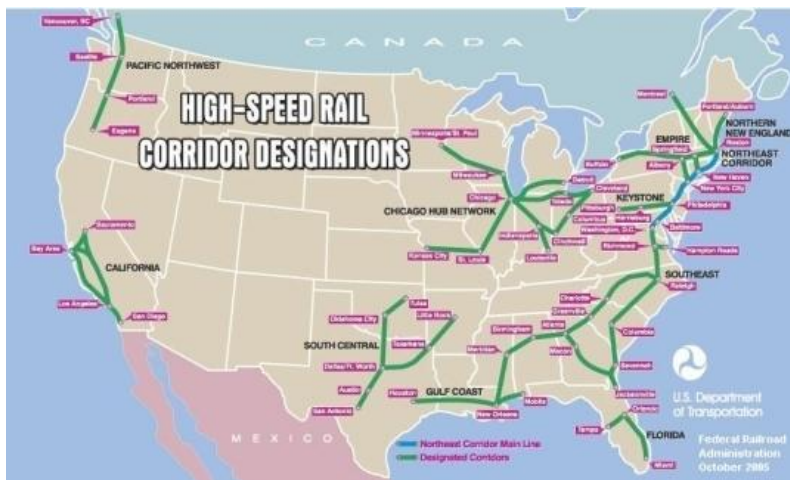
But what if the same route took half the time by train as it did by car — and cost less?

That's the scenario in the making across the country's "mega-regions."

Mega-region is a term coined by Richard Florida, a transportation researcher who created an economic geography of the U.S. based partially on how lit up different areas are on nighttime satellite images.

The most heavily populated and economically vibrant mega-region is the Boston-Washington, D.C. corridor, known to many as the Megapolis.

Nationwide, mega-regions like the ones stretching from Chicago to Kansas City and from San Diego up to Sacramento account for 3/4 of American economic activity. Check out this Department of Transportation map to see what I mean:



High-speed rail in these 11 key areas would lessen commute times between close-together cities like Washington and Baltimore, and it would let business travelers get from Boston's city center to the nation's capital in less than 3 hours.

Germany's Siemens (NYSE:SI) is leading the way for high-speed rail development in the U.S.

Siemens landed a \$466 million contract from Amtrak, the largest passenger rail operator in North America, as part of its multi-year Fleet Strategy Plan.

The Fleet Strategy Plan calls for Amtrak's entire fleet of passenger rail cars and locomotives to be replaced over the next 30 years.

Through Siemens Mobility Division, the company will build 70 electric locomotives with energy efficient features for Amtrak's Northeast and Keystone Corridor lines.

"This isn't your grandfather's locomotive," said Oliver Hauck, president of the Mobility Division of Siemens Industry Inc.

"Not only will we use renewable energy to build them, the locomotives will also include energy efficient features, such as regenerative braking that can feed up to 100 percent of the energy generated during braking back to the power grid."

Already a producer of light rail trains in America, every third light rail vehicle in the United States is a Siemens product.

These new trains will be customized to meet the needs of the most heavily traveled rail route in the country — the Northeast corridor, which covers Washington D.C. to Boston — at a sustained speed of 125 mph, and up to 110 mph on the Keystone Corridor from Philadelphia to Harrisburg, PA.

"Amtrak's order for 70 new electric locomotives will not only create new manufacturing jobs, it supports the Department of Transportation's strategy to use transportation to build the infrastructure needed to support a modern growing economy, while helping make our cities more livable, improve the environment and reduce our dependence on foreign oil," said Joseph C. Szabo, Federal Railroad Administrator.

"This new equipment will go far in meeting the rapidly growing demand for intercity passenger rail service in the Northeast."

We can expect to see the first of these new trains completed by February 2013.

Baseball fans in Baltimore know the bittersweet boost the local economy gets each year from Amtrak, as Red Sox and Yankees fans flood down for games against the Orioles. It turns out that it's cheaper for Boston and New York natives to catch the train down and catch a game than it is to buy a ballpark seat in their hometowns!

And the simple fact is that the nation's demographics are shifting. More Americans living in cities where they do not have family means more trips home, which require more transportation options than just planes and automobiles.

As people move, so does money. Florida will soon surpass New York in population, and the state wants high-paying, tech-oriented jobs to reinvigorate its flagging tourism economy.

Turning Florida into the Silicon Sunshine State will require high-speed lines between cities like Orlando and Miami, as well as commuter networks surrounding each city.

Tampa Congresswoman Kathy Castor told *Time* magazine that "high-speed rail is a high-tech project. . . a linchpin of Florida's reinvention."

But what's going on in the country's most populous state?

California, Here it Comes!

Some of the security hassles of air travel may be replicated as rail lines get more packed, but times to and from far-flung airports would be eliminated. What's more, you can book a train ticket for a reasonable price at any train station and often without an attendant. There's no comparison when it comes to the runaround.

There's also a huge savings to be had at the state level, as California makes clear.

California's state government says a statewide high-speed rail network would eliminate the need for five runways and 90 boarding gates to be built by 2020, and construction crews alone would employ 160,000 workers.

By 2035, all jobs associated with expanding railway infrastructure in the Golden State could come to 450,000!

That's in addition to saving on traffic congestion, pollution, and health care costs for citizens (3000 lane-miles of freeway would also be cut out by rail), and creating one billion dollars in revenue surplus for Sacramento, where state legislators are perennially locked in budget strife.

You know what, though? It's right to doubt the government's ability to get rail done right. Private companies with international experience will play a major role in the high-speed rail roll out.

America Plays Catch-up with International High-Speed Rail

General Electric has joined with Chinese manufacturer CSR Corporation Limited to advance high speed rail projects in the United States by combining GE's manufacturing and supply chain with CSR's rail development and operations expertise.

CSR is one of the world's largest transportation equipment companies.

A \$50 million dollar investment is the first phase of the agreement, which aims to create an estimated 250 high-tech jobs by 2012. All final production will take place in the States, sustaining 3,500 long-term high-tech manufacturing U.S. jobs.

It will also be the first venture to supply high speed passenger trains for the proposed Florida and California high speed rail corridors.

In addition to high speed rail, the partnership also advances passenger rail transport with medium-speed passenger trains and transit rail vehicles for America's urban areas.

This most recent partnership is yet another step forward toward that goal.

While the U.S. is just breaking ground on high speed rail projects, China continues to reinforce their fast rise to dominance. China has the most miles of high-speed rail of any country in the world, and the projected completion date of the major Beijing-Shanghai HSR line has been revised twice—to come earlier!

The Middle Kingdom is on track to spend upwards of \$100 billion per year on high-speed rail, and Chinese officials are committed to making their mark on U.S. rail travel, too.

Many Americans who have traveled on Japan's shinkansen or France's TGV high-speed rail systems know how many benefits come along when you travel at speeds over 110 miles per hour.

In fact, projections of how quickly one could get from, say, Boston to D.C. by high-speed rail are not based on theory alone. . .

Domestic high-speed travel schedules are being calculated using TGV speeds and similar distances in France.

For now, traversing the Megalopolis in three hours overland may seem like a dream, but there is a practical reality to high-speed rail and its economic impact.

High-speed rail stations could boost nearby real estate values when they're constructed, helping patch the market holes left by the sub-prime meltdown.

And on a personal level, elderly travelers and people whose physical impairments prevent them from comfortably traveling by plane are eager for an option.

There we see a clear benefit to Americans with a variety of physical conditions (not to mention fear of flying), as well as an influx of new money into sightseeing and other activities.

Comfort is a major component of the rail travel experience. Listen to your iPod, read the paper, or nod off until you reach your destination. . . it's up to you.

In much of the world, train service includes the same kind of aisle service flight attendants provide. Believe it or not, the air industry got that idea from the choo-choo!

Which brings us to a strange pivot point between the status quo and the simmering potential. . . maglev (magnetic levitation) rail between airports and city centers.

Maglev Moves Faster

When you ride the maglev line from Shanghai's international airport right to Longyang Road in the city, you watch the digits tick up, up, and way past what the boldest Ferrari driver could ever achieve.

The Shanghai maglev goes from 0 to 220 mph in just two minutes! Expect to rocket over 280 — cruising speed — and complete the 19-mile trip in seven or eight minutes.



With millions of new drivers hitting the road every year, the Shanghai maglev helps prevent congestion on the way to China's third busiest airport.

Is maglev viable here in the United States? We've heard suggestions of "maglev incorporating superconductor technology" as a means of transmitting electricity while running rail lines.

Smart grid meets smart rail. . . now there's an idea!

We can all agree on the need to get people — and money — moving.

And rail infrastructure companies are chomping at the bit to deliver their products and services in exchange for serious dollars.

Environmental concerns, urbanization (or re-urbanization, in the case of many U.S. cities like Green Chip's Baltimore base), and fuel price volatility all make rail and associated infrastructure companies prime beneficiaries for infrastructure spending.

Whether it's maglev or another train technology, there's no room for skimping, and only companies with top-tier systems will win out.

As citizens, we need mass transit to be safe not only for existing riders but also to attract new ones. Getting Americans to ditch their cars is tough enough without such disasters deterring them further.

As investors, we want to put money into companies that can help policymakers be proactive and stay ahead of the curve when it comes to safety and efficiency.

So stay tuned, because as high speed rail development picks up, we're going to be there to [cash in](#).

You can view the HTML version here: [High-Speed Rail: Getting Back on Track](#)

investment. The publisher, editors and consultants of Angel Publishing may actively trade in the investments discussed in this publication. They may have substantial positions in the securities recommended and may increase or decrease such positions without notice. Neither the publisher nor the editors are registered investment advisors. Subscribers should not view this publication as offering personalized legal or investment counseling. Investments recommended in this publication should be made only after consulting with your investment advisor and only after reviewing the prospectus or financial statements of the company in question.