



US Has a Lot to Do to Catch Up to This Swiss Engineering Marvel

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Americans might have understandably reacted with envy at the opening of the Gotthard Base Tunnel in Switzerland on Wednesday.

At around 35 miles (56 km) long and running as deep as 1.4 miles (2.2 km) under the Alps, the \$12 billion Gotthard is the longest tunnel in the world excluding city subways, and is supposed to revolutionize rail travel in Europe, cutting the Zurich-to-Milan trip by at least an hour for passengers and taking one million tractor-trailer trucks a year off the road. Remarkably, it was also completed on time and on budget.

The biggest economy in the world cannot keep up with such engineering marvels. Rail news in the United States has been decidedly less glamorous in recent years.

Funding for California's \$68 billion high-speed rail is still elusive. A long-discussed new rail tunnel under the Hudson River between New York and New Jersey is only a distant possibility. Amtrak, the government-funded rail company which handles long-distance trains, has suffered a series of recent fatal accidents. Subways around the country are in desperate need of work. Eighteen months after electrical fires killed a rider, sections of the Metro in Washington, DC are slated to close this month, sometimes for weeks, as part of a year-long overhaul.

"All of the transportation in this country has been dictated in a certain direction literally for the past 70 years in favor of cars, asphalt and aviation to the detriment of rail," said Andy Kunz, president of the U.S. High Speed Rail Association, a nonprofit advocacy group. "We've ignored rail and treated it like a stepchild nobody wanted."

But Kunz and others said the future of rail in the US is not as gloomy as the recent setbacks might suggest.

The US boasts the most extensive freight rail system in the world. Freight trains carry around 43 percent of the nation's goods, whereas they haul only 18 percent in the European Union, according to the American Society of Civil Engineers, or ASCE, and Eurostat. Europeans travel via rail far more often than Americans, of course, because of shorter distances. The difference is hard to calculate, but everyday France's SNCF, the state-owned rail company, transports around

275,000 people on its high-speed trains alone, versus Amtrak's daily ridership of 85,000 on its entire network.

But passenger rail systems are becoming increasingly popular. Commuter railroads' ridership in the US has grown by more than 28 percent in the last ten years, ASCE said. It now exceeds 468 million passengers annually.

Hastening the growth in passenger rail, however, would ironically require Americans to face up to some of the natural limits of rail in the country, experts said.

Many Americans won't ever ride passenger trains — for good reason, said Randal O'Toole, a senior fellow at the libertarian Cato Institute.

The US freight system works well because it hauls coal from mines to power plants and grains from farms to ports, O'Toole said. Conversely, many Americans live and work in suburban sprawl. They don't need trains that lead to city centers, or it's not worth it for them to take a train into the city if they can drive straight to their workplace and avoid second or third rides on subway or buses.

"Rails work best when moving big loads from point A to B," O'Toole said. "They do not work well when there are lots of points and destinations."

Adie Tomer, a fellow at the nonpartisan Brookings Institution Metropolitan Policy Program, agreed that the rise of the automobile and growth of suburban sprawl has made passenger rail less viable in the US. Trains simply can't reach all the industrial parks, office complexes and shopping malls in the suburbs. "That growing distance between people and jobs, people and recreation — people and everything else — that kind of low density does not work well with rail," Tomer told VICE News.

So building tunnels through mountains like the Swiss wouldn't help anyone in the US, said Tomer.

Rather, Americans need to fix the backlog in repairs on current rail networks, buses and ferries — estimated at \$86 billion by the Federal Transit Administration — to fix the problems that turn off would-be passengers of mass transit. "The first order of business is making sure what we've already built we maintain," Tomer said. "Why would you build an expansion or extension to your house if your roof is falling?"

Then, people need to focus on building in regions that sorely need mass transportation. The Los Angeles to San Francisco route, where California is building its high-speed rail, is a perfect example, he said. But smaller projects in Denver and Texas are also promising. "Let's look for those small price tag projects that can make a real difference in people's lives," he said.

Citizens support those projects, Virginia Miller, director of media relations at the American Public Transportation Association, said. Voters approved 10 out of 14 local and statewide referendums last year on the subject, according to association data.

"On the state and local level, when public transportation ballot initiatives are voted on, they are overwhelmingly voted for passage," Miller said, adding that voters approved increases sales

taxes and property taxes for rail and other mass transit. "People are saying 'We want a better transportation system. Please tax us.'"

In Denver, new commuter and light rail lines and the renovation of Union Station downtown has attracted more than \$1 billion in economic development, she said. Dallas has expanded its light rail network to 90 miles (150 km), the most in the country, despite Texas' car-centric culture, she added.

Private companies have also floated bullet train service between Los Angeles and Las Vegas, Houston and Dallas, and Minneapolis and Rochester. The companies are now securing funds from investors, including Chinese and Japanese.

In 2011, Florida Governor Rick Scott rejected federal dollars to build a high-speed rail line, saying it would soak taxpayers. But All Aboard Florida, which already owns the 100-year-old tracks in the state, is planning on launching service between Miami and West Palm Beach next year and eventually expanding to Orlando. The company still needs to raise \$1.75 billion to finish the project, modeled on the Acela which links Washington and Boston via Philadelphia and New York at the highest speed for a train in the US — on some stretches, Acelas hit top speeds of 150 mph (240 kmh), still a lot slower than France's TGV, which routinely goes to 200 mph (320 kmh).

Those projects are modest, but they show how the US is making progress in changing its direction after favoring roads for decades, said ASCE Senior Managing Director Casey Dinges.

Americans shouldn't feel dismayed by the slow progress. Switzerland devoted enormous resources to the Gotthard Base Tunnel, and it still didn't appear overnight, he said. "That tunnel in the Alps took 17 years to build," Dinges told VICE News. "That's one little wakeup call for anybody."