# Biden's Wrongheaded Push for Expensive \& Obsolete Rail Projects 

Randal O'Toole

January 27, 2021
With "Amtrak Joe" Biden in the White House and the Democrats' takeover of Congress, highspeed train advocates gleefully anticipate federal funding for a true high-speed rail system. Before Congress approves such funding, however, it should ask hard questions including: How much will it cost? Who will pay for it? And how many will actually use it?

Such questions are particularly pertinent considering how poorly the last high-speed rail spending spree worked out. In 2009 and 2010, the Obama administration gave $\$ 11.5$ billion to states for high-speed rail projects. While only the California project was expected to produce trains faster than 150 miles per hour, the other projects were supposed to increase frequencies and speeds in nine corridors.

Ten years later, only one corridor has seen an increase in frequencies, by two trains a day. Three corridors saw speeds increase by an average of 2.3 miles per hour. Speeds actually declined by an average of 1.1 miles per hour in three other corridors. Four corridors saw no changes at all. Basically, the $\$ 11.5$ billion was wasted.

Despite this failure, passenger train advocates believe they are entitled to federal high-speed rail funding because the federal government funded the Interstate Highway System. But there are big differences between interstate highways and high-speed rail proposals.

First, the interstates were paid for entirely by highway users. In contrast, high-speed rail fares would cover none of the construction costs and only a fraction of the costs of operating highspeed trains.

Second, interstates were far less expensive to build than rails. The 48,000 miles of interstates cost about $\$ 530$ billion in today's dollars, or an average of about $\$ 10$ million a mile for a fourlane freeway. California, meanwhile, spent about $\$ 100$ million a mile building a high-speed rail line on flat ground and expected to spend at least $\$ 170$ million a mile through hilly territory.

Third, the interstates connect with the nation's other 4 million miles of roads, allowing door-todoor travel from just about anywhere to anywhere else in the contiguous 48 states. High-speed rail lines won't easily connect to other forms of travel and may not even connect with each other.

Finally, because the interstates provided travel that was faster, more convenient, and less expensive than before, they are enormously productive, carrying about 20 percent of all passenger travel and 20 percent of all freight ton-miles shipped in the United States. In contrast,
being slower than flying, less convenient than driving, and more expensive than both, a highspeed rail network will carry no more than about 2 percent of passenger travel and no freight.

The Obama administration originally proposed an $\underline{8,600-\text { mile high-speed rail system that would }}$ consist of six disconnected networks. If built to California's high-speed rail standards, this would cost more than $\$ 1$ trillion. A study prepared by high-speed rail advocates estimated that it would carry 25 billion passenger-miles a year, or only about 0.5 percent of the nation's passenger travel.

A more ambitious plan offered by a group calling itself US High-Speed Rail would include 17,000 miles of high-speed rail lines running as fast as 220 miles per hour supplemented by 15,000 miles of moderate-speed lines running as fast as 110 miles per hour. This system would cost at least $\$ 3$ trillion and still only be about two-thirds as long as the Interstate Highway System. If the 8,600 -mile system would carry 0.5 percent of passenger travel, then this $32,000-$ mile system will carry less than 2 percent of passenger travel.

Rail advocates point out that China has built 22,000 miles of high-speed rail lines. Yet most riders of Chinese high-speed trains were previously riders of conventional trains - the trains attracted few if any out of cars or airplanes. Amtrak doesn't carry enough passengers to justify high-speed trains.

Moreover, constructing those 22,000 miles helped put China's state railway system $\$ 850$ billion in debt, which has forced the country to slow rail construction. Meanwhile, China has built 93,000 miles of expressways, about 40 percent more than in the United States, and because those expressways pay for themselves with tolls it is building about 5,000 more miles each year.

Finally, rail supporters claim that high-speed train operations will emit less greenhouse gases than flying. What they don't say is that building high-speed rail lines generates thousands of tons of greenhouse gases per mile, and it would take decades for any operational savings to recover that cost and then only if the lines were heavily used. Such heavy use is unlikely in most corridors in the United States.

Randal O'Toole (rot@cato.org) is a senior fellow with the Cato Institute and author of Romance of the Rails: Why the Passenger Trains We Love Are Not the Transportation We Need.

