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WHY MISSOURI TAXPAYERS SHOULD NOT BUILD HIGH-SPEED RAIL

By Randal O'Toole

In February 2009, President Obama asked Congress to include \$8 billion for high-speed trains in the American Recovery and Reinvestment Act. High-speed rail, he said, would be his “signature issue” in the stimulus program. Later that month, Obama’s 2010 budget proposed to spend an additional \$1 billion per year for five years on high-speed rail.

In April, Obama presented his national high-speed rail vision to the public. Under the plan, about 8,500 route-miles of high-speed trains would connect key cities in 33 states. In June, the Federal Railroad Administration published its guidelines for state applications for a share of the stimulus funds for local rail projects. The White House claims the high-speed rail plan “mirrors that of President [Dwight] Eisenhower, the father of the Interstate Highway System, which revolutionized the way Americans traveled.”

However, there are four crucial differences between interstate highways and high-speed rail. First, the Bureau of Public Roads gave President Eisenhower

a reasonable estimate of how much the interstates would cost. Second, the Bureau of Public Roads had a plan for paying for interstate highways: through gas taxes and other highway user fees. The third key difference is that the interstates truly did revolutionize American travel, while high-speed rail would never be more than a tiny, but expensive, part of the American transportation network. Finally, given that interstate highways serve all major cities in all 50 states, it is likely that the majority of Americans travel over an interstate at least once if not several times a week. In contrast, high-speed trains would mainly be used by a relatively wealthy elite.

The most optimistic analysis projects that, if the FRA high-speed rail network is completely built by 2025, the average American would ride this system just 58 miles per year — about one seventieth as much as the Interstate Highway System. That is hardly revolutionary. Moreover, considering the premium fares for riding high-speed trains and the fact that trains

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will mainly serve downtown areas, most of that use would be by the wealthy and by bankers, lawyers, government workers, and other downtown employees whose employers pay the fare, while all other taxpayers would share the cost.

All politics is local, so every member of Congress will want a piece of the high-speed rail pie. Initial funding of \$8 billion effectively commits the nation to a \$99 billion program, which eventually turns into a \$700 billion program, with actual costs eventually exceeding \$1 trillion.

Despite optimistic forecasts by rail proponents, passenger fares would rarely if ever cover high-speed operating costs. Amtrak operations currently cost federal and state taxpayers more than \$1 billion per year. According to the bipartisan Amtrak Reform Council, Amtrak's trains between Boston and Washington lost nearly \$2.30 per passenger in 2001. If trains in the most heavily populated corridor in the United States cannot cover their costs, no other trains will come close. In recent years, Missouri's annual operating subsidy for Amtrak has hovered around \$8 million per year.

JAPAN AND EUROPE

In 1964, Japanese National Railways began operating the world's first high-speed train, the 135-mph Tokaido Shinkansen, or bullet train, between Tokyo and Osaka. This is also the only high-speed train in the world that has paid for itself, and for good reasons.

First, it was built across flat land at a time when Japan's property values and construction costs were far lower than today. More important, the Tokaido line connects three of the world's largest and densest metropolitan areas: Tokyo, with 21 million people in 1965 and 33 million today; Osaka, with 13 million in 1965 and

17 million today; and Nagoya, with 6 million people in 1965 and 9 million today. Few other places in the developed world have such concentrations of people located a few hundred miles apart.

Meanwhile, as attractive as the bullet trains are to American tourists, residents of Japan hardly use them. Japanese travel by train more than the people of any other nation in the world — about 1,950 miles per person per year. But high-speed rail carries only about 20 percent of that travel, or less than 400 miles per person. Japanese travel as much on domestic airlines and almost as much by bus as by high-speed rail, and they travel by car 10 times as many miles per year as by high-speed rail.

American tourists who visit Europe often come home wishing that the United States had a similar transportation system. Of course, the United States isn't Europe; our population densities are lower, and our incomes are higher, so fewer people would ride transit even in dense areas.

More importantly, Europe isn't Europe either — at least not the Europe that many Americans fantasize about. For example, as of 2007, at least 150 European urban areas had some form of rail transit, compared with just 30 in the United States. Yet the average resident of the EU-15 travels just 95 miles per year on urban rail transit, compared with 87 for the average American. This trivial difference hardly justifies the huge amount Europe spends subsidizing urban transit.

ENVIRONMENTAL COSTS

After studying high-speed rail proposals in Britain, Professor Roger Kemp of Lancaster University concluded that the construction costs dwarf any



savings in operations unless the rail lines are used to their full capacity. With a round-the-clock average of just one train per hour in each direction, and no more than two trains per hour during the busiest times of day, even Amtrak's New York-to-Washington corridor operates at far from full capacity.

Electrically powered high-speed trains produce less greenhouse gases only if the electricity used is generated from renewable power sources. Most electricity in the United States comes from fossil fuels, with the result that urban rail transit systems in such cities as Baltimore and Washington generate as much or more greenhouse gases, per passenger mile, as driving an SUV — much less an ordinary car.

For the sake of comparison, it is far more cost effective to save energy by encouraging people to drive more fuel-efficient cars than it is to build and operate high-speed rail. When considering the energy required for construction and reconstruction of high-speed rail lines, improvements in auto and airline energy efficiencies, and the high energy cost required to move trains at higher speeds, it appears unlikely that high-speed rail would have any environmental benefits at all.

REGULATING PROPERTY RIGHTS

High-speed rail is only one part of the Obama administration's "livability" campaign to completely reshape American lifestyles. In addition to high-speed rail, this program includes more urban transit (particularly rail transit), bicycle and walking paths, encouragement of high-density housing, and discouragement

of single-family housing and driving. As Transportation Secretary Ray LaHood recently admitted, the ultimate purpose of this campaign is to "coerce people out of their cars."

Despite the terms "livability" and "smart growth," unless you are rich, athletic, and have no children, the government programs in question create cities that are neither smart nor livable. Even though there are far more effective and less expensive ways to reduce the environmental costs of driving, smart growth is accepted without question by many policymakers, reporters, and urban leaders.

The failure of these policies to have much of an effect on driving might not be important were it not for the fact that the policies impose huge costs on urban residents. Numerous surveys show that the vast majority of Americans say they want to live in a single-family home with a yard. Yet livability policies deliberately make this type of housing unaffordable to low- and even middle-income families.

BANKERS, LAWYERS, AND BUREAUCRATS

Amtrak carries between 5 billion and 6 billion passenger miles each year, which is roughly 0.1 percent of all passenger travel in the United States. The optimistic analysis prepared by the Center for Clean Air Policy predicts that, if the FRA high-speed rail plan were completed before 2025, it would carry 25.5 billion passenger miles per year (5.5 billion of which would be taken from conventional Amtrak trains). However, 4.8 billion of these passenger miles would be on the existing Boston-to-Washington corridor, so the FRA plan would increase high-speed rail travel by 20.6 billion

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passenger miles.

The Census Bureau projects that the U.S. population will be 357 million people in 2025, which means the FRA system will carry each person an average of 58 miles per year. In the unlikely event that per-capita driving and flying do not increase, the FRA system would then carry just 0.3 percent of passenger travel.

STATE-BY-STATE ANALYSIS

Upgrading the 250 miles between Kansas City and Saint Louis would cost taxpayers at least \$875 million, or nearly \$150 per Missouri resident. In the unlikely event that Amtrak can keep losses per passenger as low as those in the New York–Buffalo or Los Angeles–San Diego corridors, Missouri’s portion of high-speed rail would have operating losses of \$60 million per year, or \$10 per resident — and that is very optimistic.

Significant improvements can be made to the existing Saint Louis to Kansas City Amtrak route without the need for high-speed rail. The current Amtrak route is plagued by delays because it shares the line with freight. A recent University of Missouri study for the Missouri Department of Transportation recommended various ways to improve the current route, and work on one of those improvements began in April 2009. If the report’s three primary recommendations are funded and built, the average time between Kansas City and Saint Louis would be reduced by 20 minutes and delays would be cut by 36 percent, all for a total cost of between \$29.5 million and \$42.5 million.

In 1970, the federal Environmental Protection Agency began addressing

toxic air pollution in two ways. First, it encouraged cities to adopt behavioral solutions such as public transit and disincentives to driving aimed at getting people to drive less. Second, it required technical improvements to automobiles, such as catalytic converters. The behavioral solutions failed miserably: between 1970 and 2006, total driving increased by 170 percent and per-capita driving nearly doubled. The technical solutions, however, were incredibly successful: despite the increase in driving, total automotive emissions of most pollutants declined by well over 50 percent.

Despite this clear record of success and failure, some people still want to modify behavior in order to change American single-family home and automotive lifestyles. The administration’s livability agenda relies almost exclusively on such behavioral solutions, including high-speed rail.

CONCLUSIONS

High-speed rail is a technology whose time has come and gone. What might have been useful a century ago is today merely an anachronism that would cost taxpayers tens or hundreds of billions of dollars, yet contribute little to American mobility or environmental quality.

The United States can do many things to cost-effectively improve transportation networks in ways that save energy, reduce accidents, and cut toxic and greenhouse gas emissions. High-speed rail is not one of those things.

For more details, please see Show-Me Policy Study no. 21, which is available at www.showmeinstitute.org.



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