# High Speed Rail

## Senate Committee on Commerce, Science, and Transportation

#### Introduction

In recent years, Congress has intensely debated the viability of high speed rail and the issue largely remains unresolved. The United States Department of Transportation defines high speed rail as any train that reaches speeds of 110 miles per hour or greater. Currently, there is only one rail line in the United States that meets this definition, the high speed Acela train operating in the Northeast corridor between Washington DC and Boston. The debate concerning high speed rail has become increasing prevalent as America's highways are suffering from heavy traffic and congestion. Air travel is also prone to frequent delays. Since 9/11, heightened airport security measures have frustrated many frequent flyers and encouraged the development of alternate transport methods such as high speed rail. Many in Washington are concerned about America's energy dependence and some believe that high speed rail could reduce American demand for foreign energy imports. In today's world, climate change is a hotly contested topic, and high speed rail is known for being very efficient and environmentally friendly. In fact, studies by the International Union of Railways show that high speed trains release five times less CO2 emissions than cars and airplanes with the same passenger capacity. Congress continues to debate the issue of high speed rail as they are very aware of America's crumbling infrastructure and a need for modernization.

## Background

The development of high speed rail generates many points of controversy. Politicians do not agree on many various aspects of the issue. One of the largest controversies is the sheer cost of high speed rail. The government would have to spend 150 billion dollars if they were to build a new high speed track in the Northeast corridor capable of carrying 220 mile per hour trains.<sup>3</sup> Those costs frighten many politicians and taxpayers who believe the money could be better spent elsewhere. Another point of controversy is the role of government in America's rail systems. Many wish to privatize America's national rail company, Amtrak, and desire a similar fate for any future high speed rail developments. Others debate the financial viability of potential high speed networks. America is the world's third largest country by area and has a relatively low population density of only 35 people per square kilometer.<sup>4</sup> In light of these facts, many argue that the proposed American high speed rail networks will never see the necessary ridership rates and therefore never turn a profit. Competition from automobiles and airplanes could also inhibit profitability and make high speed rail unfeasible. A final point of controversy among politicians is whether or not high speed rail is necessary to remain competitive with foreign nations such as France and Japan. France and Japan are considered world leaders in the development and implementation of high speed rail networks.

<sup>&</sup>lt;sup>1</sup> Schor, Elana. "US DOT Clocks High Speed Rail at 110 Mph." Street Blog NYC. June 17, 2009. Accessed October 20, 2015.

<sup>&</sup>lt;sup>2</sup> Fortea, Pedro. "Spanish High Speed Rail." Mass Transit. June 2, 2008. Accessed July 26, 2015.

<sup>&</sup>lt;sup>3</sup> Nixon, Ron. "\$11 Billion Later, High-Speed Rail Is Inching Along." New York Times. August 6, 2014. Accessed July 29, 2015

<sup>&</sup>lt;sup>4</sup> "United States." The CIA World Factbook. Accessed July 17, 2015.

France has built nearly 2,000 km of high speed track since 1981 and their TGV network has successfully carried two billion passengers without a single fatality throughout its entire history. The Japanese Shinkansen bullet trains have carried ten billion passengers in their fifty year history, making it the most traveled high speed rail network in the world. While these achievements are incredibly impressive, Americans remain divided over whether or not high speed rail is needed. With our huge airline networks crisscrossing the nation some see the American high speed rail projects as being fruitless and too expensive.

### History

The history of the high speed rail debate has its origins in the history of American rail transport. Railways were popularized during the industrial revolution of the early 1800's. Wealthy industrialists built rail networks across the East Coast and the Civil War proved that railroads were a crucial method of transport. Rail travel was revolutionized with the completion of trans-continental railroad in 1869 and the route networks of the major rail companies continuously grew up into the 1920's. The first two decades of the twentieth century are considered by rail historians to be the golden age of rail transport. At its peak in 1916, there were 254,037 miles of track in the United States and rail was the dominate method of transport.<sup>7</sup> An astonishing ninety-eight percent of all intercity passenger traffic traveled by train.<sup>8</sup> Rail lines seemingly reached every corner of the country and communities depended on the rail lines for their economic viability. However, after 1920, the American rail networks entered a period of steady decay. The introduction of the model-T ford created tough competition and the airplane became an increasing reliable method of mail transport in the coming years. The Great Depression took a heavy toll on the rail industry and while World War Two revived cargo transport, passenger rail never again saw the level of prosperity present in the early 1920's. Following the turbulent years of World War Two, passenger rail lines repeatedly attempted to stay competitive however they were always outclassed by automobiles and airplanes. The interstate highway system further eroded the practicality of rail transport and passenger rail service became immensely unprofitable. Without any profits, the railroads fell into disarray. Service was dismal, delays were frequent, and the infrastructure crumbled. At one point, the level of decay was such that railcars would often fall off tracks while stationary in a rail yard in an act known as "standing derailment." The collapse and bankruptcy of the rail giant Penn Central Transportation Company finally spurred the United States Congress to act. In 1970, Congress passed the Rail Passenger Service Act, which consolidated all passenger rail service and formed Amtrak, the current

<sup>&</sup>lt;sup>5</sup> Lichfeild, John. "François Hollande's TGV Vanity Project Is on a High-speed Railway to Nowhere." The Independent. December 26, 2014. Accessed September 12, 2015.

<sup>&</sup>lt;sup>6</sup> Ryall, Julian. "Bullet Train at 50: Rise and Fall of the World's Fastest Train." The Telegraph. October 24, 2014. Accessed July 31, 2015.

<sup>&</sup>lt;sup>7</sup> "The American Railroads: A Long And Storied History." American Rails. 2015. Accessed July 12, 2015

<sup>&</sup>lt;sup>8</sup> Ibid

<sup>&</sup>lt;sup>9</sup> "The Impact of the Staggers Rail Act of 1980." Association of American Railroads. May 1, 2015. Accessed July 29, 2015.

national rail company. 10 Freight rail suffered for another decade until the Staggers Act of 1980 deregulated and privatized the freight companies. Since 1980, the freighter rail companies have become immensely efficient and profitable and serve as an example to the rest of the world. 11 In the 1980's and 90's Amtrak steadily maintained the passenger rail service and made several attempts to achieve profitability including the introduction of the metro liner service on the East Coast. The Metro liner successfully served for 37 years before it was finally closed with onset of the Acela. These efforts however paled in comparison to those of Europe and Japan where modern high speed rail had become increasingly prevalent. Amtrak did briefly test German ICE high speed trainsets in the United States and performed similar tests with the Swedish X2000 trainsets. Both trainsets were briefly put into service, however Amtrak ended the program only five months after it began. In 2000, Amtrak unveiled America's first high speed rail network, the Acela, as well as completing the electrification of the Northeast Corridor. The Acela has become very profitable, however it is marred by several problems. One major problem is its reliance on aging infrastructure that limits its speed. Although the Acela is capable of reaching 150 miles per hour, obstacles such as Baltimore's one hundred year old rail tunnel prevent this from being achieved. <sup>12</sup> In fact, the Acela only reaches its top speed for a short 30 mile stretch of track in Rhode Island. The average speed of the Acela is only 80 miles per hour, which isn't far ahead of the 70 mile per hour speed limit on many American interstates. The total travel time between Washington DC and New York is two hours and forty five minutes; however, if the Acela were to operate on a completely new rail track, the journey would only take a meager ninety minutes.<sup>13</sup> Another problem with the Acela is that the route cannot easily be expanded as all rail lines South of Washington DC are owned by Freight companies such CSX and Norfolk Southern.<sup>14</sup> In the 2000's ridership increased, and Amtrak developed considerable market share in high density intercity routes such as those in between Washington DC and Boston. Despite the increased ridership, Amtrak has yet to become profitable and Amtrak's funding is still to this day tied to annual appropriations from Congress.

### **Recent Developments**

Recent Developments concerning the issue of high speed rail are centered around promises made by President Obama regarding the development of high speed rail. In 2009, The President announced his plans for a high speed network that would grant 80 percent of the nation's population access to high speed rail within the next 25 years. In response, the Federal Railroad Administration published the *High Speed Rail Strategic Plan* and the High-Speed Intercity Passenger

<sup>&</sup>lt;sup>10</sup> "Historic Timeline." Amtrak: A History of America's Railroad. 2015. Accessed July 29, 2015.

<sup>&</sup>lt;sup>11</sup> Edition, Print. "High Speed Railroading." The Economist. July 22, 2010. Accessed July 12, 2015.

<sup>&</sup>lt;sup>12</sup> Nixon, Ron. "\$11 Billion Later, High-Speed Rail Is Inching Along." New York Times. August 6, 2014. Accessed July 29, 2015

<sup>13</sup> Ibid

<sup>&</sup>lt;sup>14</sup> Edition, Print. "High Speed Railroading." The Economist. July 22, 2010. Accessed July 12, 2015.

Rail (HSIPR) Program was launched in June of 2009.<sup>15</sup> In 2008, Congress approved the Passenger Rail Investment and Improvement Act which made a sum of 2.1 billion dollars available to the HSIPR. In the 2009 American Recovery and Reinvestment act, Congress provided 8 billion dollars in additional funding to the HSIPR.<sup>16</sup> In additional to the federal programs, California has stated its intentions to create a high speed rail network connecting its largest metropolises. The State of California has since formed the California High Speed Rail Authority (CAHSRA) to tackle this issue. CASHRA envisions an 800 mile route connecting Los Angeles and San Francisco with 24 stops in between.<sup>17</sup> The train's top speed is projected to be 220 miles per hour. Construction has begun and CASHRA is asking trainset manufactures to place bids for a contract.<sup>18</sup> The federal government has also provided grant money to several states to allow them explore high speed rail possibilities. Many republican governors oppose these grants. In 2011, Gov. Rick Scott of Florida canceled his state's high speed ambitions and returned federal grant money. Gov. Scott Walker of Wisconsin acted similarly and deemed Wisconsin's high speed rail initiative to be excessively costly. Wisconsin's federal grant money was soon returned. Acting in line with his republican counterparts, the Governor of Ohio also refused federal grant money.<sup>19</sup>

In the private sector many new developments are present as entrepreneurs see an opportunity to profit. The private company "All About Florida" has announced plans to create a high speed rail service connecting Miami, Fort Lauderdale, West Palm Beach, and Orlando at speeds of over 125 miles per hour. <sup>20</sup> The project is supposedly privately financed; however, the builders have recently requested a 1.5 billion dollar loan from the Federal Railroad Administration. The loan is to be paid back with interest over the next twenty five years. All About Florida expects the rail line to be in service by 2017; however, that estimate seems very generous. The company does face numerous obstacles and many counties along the proposed route have voiced their opposition. In Texas, Richard Lawless, chairman and chief executive of Texas Central Railway, has announced plans to create a high speed route connecting Houston and Dallas. Lawless argues that the Texas route is ideal for high speed rail as the traffic between the two cities is immense and high speed rail could be very competitive with the airlines. Texas Central Railway plans to employ Japanese style bullet trains to whisk passengers between the two Texan metropolises at speeds of nearly 205 miles

<sup>&</sup>lt;sup>15</sup> "High Speed Rail Overview." Federal Railroad Administration. 2015. Accessed July 7,

<sup>&</sup>lt;sup>16</sup> "High Speed Rail Overview." Federal Railroad Administration. 2015. Accessed July 7,

<sup>&</sup>lt;sup>17</sup> "Welcome." California High-Speed Rail Authority. 2015. Accessed August 25, 2015. http://www.hsr.ca.gov/.

<sup>&</sup>lt;sup>18</sup> Ibid

<sup>&</sup>lt;sup>19</sup> Nixon, Ron. "\$11 Billion Later, High-Speed Rail Is Inching Along." New York Times. August 6, 2014. Accessed July 29, 2015

<sup>&</sup>lt;sup>20</sup> "Passenger Train Service." All Aboard Florida. 2015. Accessed October 11, 2015. http://www.allaboardflorida.com/.

per hour.<sup>21</sup> The total travel time would be just over ninety minutes. Construction is expected to be complete by 2021.

#### **Democratic Point of View**

Members of the Democratic Party generally believe in the necessity and viability of high speed rail networks and encourage their continued development. Ever since President Obama's 2009 declaration in support of high speed rail, democratic political leaders have voiced their strong support for the expansion of America's high speed rail networks. In the 2012 official Democratic Party platform, Democrats declared "We support long- term investments in our infrastructure. Roads, bridges, rail and public transit systems....are critical to economic growth."22 Democrats support the creation of high speed rail projects for multiple different reasons. One of the principal reasons is allowing middle class families access to more affordable transport alternatives. With air fares on the rise and ancillary fees being levied against all air passengers, high speed rail could provide cheaper long distance transport for financially struggling families. Liberals also point to the jobs that could be created by expanding high speed rail networks. The added jobs involved in the construction and operation of high speed rail could provide help for Americans struggling after the 2008 economic crash. The clear environmental benefits of high speed rail also entice Democrats to voice their support for the creation of new high speed rail networks. Democrats often point to congested roads and airports as evidence for the necessity of new high speed rail. The high speed rail ambitions of Democrats are embodied by a quote from Obama's speech in 2009 "Imagine whisking through towns at speeds over 100 miles an hour, walking only a few steps to public transportation, and ending up just blocks from your destination. Imagine what a great project that would be to rebuild America."23 Democrats see high speed rail as a relevant and important method for improving America.

## Republican Point of View

Members of the Republican Party generally oppose the development and implementation of high speed rail in the public sector. Republicans see high speed rail as unnecessarily expensive and do not see any potential profitability in high speed rail. According to the official Republican Party platform, conservatives wish for Amtrak to be privatized and want all high speed rail initiatives to be undertaken in the private sector. California Republican Representative Jeff Dunham expressed the common Republican belief by stating "High-speed rail can be a good idea; I just think it should be left up to the private sector, Proposed projects in Texas and Florida were better models." In the official party platform, Republicans declared "It is long past the time for the federal government to

<sup>&</sup>lt;sup>21</sup> "Our Focus: High Speed Rail Corridor." Texas Central Railway. 2015. Accessed August 9, 2015

<sup>&</sup>lt;sup>22</sup> "The Democratic Platform." Democrats.org. 2012. Accessed August 13, 2015.

<sup>&</sup>lt;sup>23</sup> "High Speed Rail Overview." Federal Railroad Administration. 2015. Accessed July 7, 2015. https://www.fra.dot.gov/Page/P0060.

<sup>&</sup>lt;sup>24</sup> Nixon, Ron. "\$11 Billion Later, High-Speed Rail Is Inching Along." New York Times. August 6, 2014. Accessed July 29, 2015.

get out of the way and allow private ventures to provide passenger service."<sup>25</sup> One of the principle reasons conservatives oppose high speed rail is the sheer cost. In order to operate a high speed rail network, new specialized tracks must be built at immense expense to the taxpayer. Rather than have taxpayers bear the burden, Republicans consider the development of high speed rail is best left to the private sector. Many Republican politicians also doubt the profitability of potential high speed rail. Amtrak already requires heavy subsidies. The public has to subsidize every ticket by nearly 50 dollars. <sup>26</sup> Many fear that high speed rail could share a similar fate and eventually cost tax payers millions in subsidies.

#### Conclusion

The high speed rail dilemma has many politicians engaged in debate. The core questions surrounding the issue remain. In Congress, politicians are debating whether or not the costs associated with high speed rail are worth the various benefits. The future profitability of the high speed networks is in doubt yet other countries have managed to create reliable, safe, and profitable high speed rail. Even after a long period of steady decline, some argue that American passenger rail transport could make a comeback and that high speed rail investment is necessary in facilitating this process. Others point to Amtrak's failures as proof that publically financed passenger rail has no viable future in this country. Controversy surrounds the proposals for high speed rail as the cost, necessity, and profitability of these projects are constantly questioned. While far behind the rest of the world, the United States could still become a major player in the world of high speed rail. Whether as a result of public or private investment the development of high speed rail is probable at some point; however, the profitability and long term viability of such projects remains debatable. The United States Congress has so far invested over ten billion dollars in high speed rail networks yet not much has come out of this investment. Whether or not future investment should be made is a very controversial topic. Republicans and Democrats remain at constant odds and a solution to the problem is needed if widespread high speed rail is to have a future.

<sup>&</sup>lt;sup>25</sup> "Republican Platform." Republican National Committee. 2012. Accessed July 9, 2015.

<sup>&</sup>lt;sup>26</sup> "Republican Platform." Republican National Committee. 2012. Accessed July 9, 2015.

### **Questions to Consider**

- Does America need high speed rail to remain competitive with other developed nations?
- Are the benefits of high speed rail worth the immense cost?
- Will high speed rail projects be profitable considering America's population density?
- Will competition from airlines and automobiles be too formidable for high speed rail?
- Is the development of high speed rail best left to the private sector?
- Would railroad appropriations be better spent improving existing rail infrastructure rather than creating new high speed rail tracks?
- Should development of high speed rail be left the states?
- If high speed rail is to be implemented, should it be placed under the control of Amtrak?
- Would high speed rail be affordable or would fares be comparable to those of the airlines?
- Where would high speed rail networks be needed the most?

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