



**TEXAS  
CENTRAL**

**United States House of Representatives Committee  
on Transportation & Infrastructure Subcommittee  
on Railroads, Pipelines, and Hazardous Materials**

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Written Testimony: Texas Central and the Future of American  
High-Speed Rail

May 6, 2021

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## Introduction

Chair Payne, Ranking Member Crawford, members of the Committee, thank you for the opportunity to testify today and share with you the transformational potential of high-speed rail in general, and the benefits of our own train project being developed in Texas.

US Department of Transportation Secretary Pete Buttigieg recently said:

*“The U.S. shouldn’t be too proud to learn from other countries, especially now that we’re out of the top 10 [ranked countries for infrastructure], I always want to see the U.S. No. 1.”*

*“The U.S. shouldn’t fall behind its competitors or its allies, like Japan, Spain and China, countries with impressive high-speed train systems, which “can’t come soon enough” to the U.S.”*

We agree, and, Texas Central is doing precisely that.

We live in a moment of tremendous challenges, from the threat of Climate Change, to unprecedented sudden unemployment and economic distress created by the pandemic, to competition from rising powers that seek to beat the United States technologically and economically. Great moments of challenge call for bold leadership and vision. High-speed rail, and the Texas Central project in particular, offer this Committee and this Nation an opportunity to show such leadership and vision.

We went around the world and have brought the best home to Texas, so that OURS will be the best high-speed rail system in North America and serve as a showcase and catalyst for other regions throughout the country. This 21st Century transportation system will transform mobility between Houston and North Texas, and we are ready to plant the seed of this high-tech industry in the US which will allow our country to lead in high-speed rail technology and LEAPFROG the early lead of CHINA and other major powers in this critical industry. After years of effort, we can now proudly say that we are ready to go.

We propose to make this project of national and regional significance a WIN-WIN opportunity for our country on multiple fronts.

WIN on SAFETY and EFFICIENCY,

WIN on JOBS and ECONOMIC COMPETITIVENESS,

WIN on ENVIRONMENTAL, SOCIAL JUSTICE and ECONOMIC EQUITY,



## WIN on CLIMATE CHANGE.

1. **WIN on SAFETY:** We will save lives in one of our most congested and growing inter-urban corridors. Today, I-45 is the highway with the highest fatality rates in the country per Popular Mechanics and other surveys. We will take 15,000 cars off the road on year one, avoid over 100,000 crashes through 2100, thereby preventing at least 800 road fatalities.
2. **WIN on JOBS and ECONOMIC COMPETITIVENESS:** Investments in this innovative project will spur economic growth not only in Texas but across the United States. It will lead to direct job creation and career opportunities in construction, material production and supply chain, and the operations and maintenance of the system. It is an investment that will spark the creation of a new high-tech industry in the U.S. It is an investment that will determine our ability to compete globally against nations that have committed to developing 21<sup>st</sup> Century transportation systems.
3. **WIN on JUSTICE:** We will contribute to address environmental, social, and economic justice:
  - a. We will bring diversity and opportunity: For three years we have been working with the cities of Dallas and Houston, as well as with communities along the alignment to produce our Business Workforce Opportunity Program (BWOP), our version of Build Back Better. The result is the most ambitious inclusion of small, rural, minority, women, veteran, and disabled individual-owned businesses ever attempted in a heavy construction project in US history. As a result, we have set specific targets for our scope, which has been defined and finalized. ALL of these targets are now included in all Texas Central contracts that we have agreed and signed. On average, 34% of the construction content will go to BWOP companies, and 24% of design project management and other services, will go to BWOP professionals and firms.
  - b. We will bring services to rural areas, like our colleagues in Spain have done with Broadband and internet access. We will improve many other services as well and provide over 25% of our jobs in rural counties.
4. **WIN on CLIMATE CHANGE:** We will improve our environment by eliminating over 8 million tons of CO2 emissions by 2100, which is equivalent to the yearly emissions of seven modern 500MW Gas-fired electricity plants today.



- a. Texas Central high-speed trains will go through non-attainment counties, which require reduction in greenhouse gasses. As we reduce those, we will contribute to less premature deaths due to air pollution (5000/yr in the case of Houston alone).

After \$700 MILLION dollars of private investment to de-risk this project, we have achieved all major permitting and engineering milestones needed to begin construction – all that is needed is for the members of this Committee and for the Administration to say the word and work with us to transform American transportation, restore American leadership in large scale infrastructure, and fulfill the promise of high-tech green jobs for the new economy.

Texas Central has, over many years, competed and recruited the best of the best expert companies from around the United States, and the whole World and we are proud and excited to present to your consideration, a high-speed rail project that is ready to break ground the second financing is finalized. This 21st Century transportation solution will connect two of America's largest regions, Houston and North Texas, in under 90 minutes at 205 miles per hour, utilizing the service-proven Japanese Tokaido Shinkansen system, the gold standard of high-speed rail worldwide. In their 56-year history, Shinkansen trains have had zero operational fatalities and their on-time performance is within seconds per-train per-year. Americans deserve the BEST in rail technology, and that's what this project offers. It will create jobs and spur economic development, thanks to years of considerable effort and thorough analysis by the Federal Railroad Administration (FRA), which completed key regulatory processes, including the Record of Decision.

This world-class transportation solution addresses congestion, safety and the efficient movement of people and goods between two of America's largest megaregions in the nation's 2<sup>nd</sup> most populous state. In fact, these two megaregions, Greater Houston and North Texas, collectively produce 6% of US GDP, and contain close to 50% of Texas' population and 5% of our national population. Connecting these cities via high-speed train will provide a much-needed regional mobility choice and solution to a corridor that is growing more congested, dangerous and unreliable as each new day passes.

Today, there are no direct passenger train options for travelers between these population centers, which means the 16 million direct journeys that are already happening annually are by airplane or automobile. Meanwhile, the size of this travel market is expected to grow at 1.5% per year until 2050, almost twice the national average, resulting in a total population of just under 20 million journeys in 2022 and just over 34 million journeys in 2050. Already, about 90 percent of travelers make



this journey by car. If you are not familiar with this area of the country, the stretch of highway that connects these two megaregions is infamous. Interstate-45 between

Houston and Dallas consistently ranks as one of the deadliest highways in the country. In 2019, the National Safety Council ranked I-45 #1 on its list of Most Dangerous Highways in the US, with 56.5 fatal accidents for every 100 miles of roadway. This is unacceptable and it is one of the principal reasons that Texans are demanding better, safer transportation choices and options.

### [Building a Culture of Safety](#)

Now, contrast the currently available options for millions of travelers every year with the impeccable safety record of the Shinkansen system over its entire 56-year history. It has moved over 10 BILLION people without a single operational accident or fatality. On time performance is also the best of any comparable system in the world. You will get to your destination within a minute of timetable schedule every time, every day. Americans deserve to have the best high-speed rail system in the world, and that is what this project offers.

Like the Shinkansen system, Texas Central's system is being designed with safety and efficiency, at the heart of every decision. Because of this CULTURE of safety and "purpose-built infrastructure", Texas Central will be able to achieve these outstanding and proven safety and reliability milestones. For instance, Texas Central tracks are completely grade separated, which means trains will **cross over or under all public roads**, and the right-of-way is equipped with intrusion prevention and detection capabilities to eliminate the risk of trains interacting with cars or other equipment. We have also designed our track to be over 50% on viaduct to lessen impact on landowners and ensure all existing public roads stay open.

To ensure that Texas Central replicates the safety-critical elements of the Tokaido Shinkansen, in 2020 the FRA published a Final Rule of Particular Applicability that establishes a comprehensive set of safety standards for the design, operation and maintenance of the Texas Central high-speed rail system, providing regulatory certainty and minimizing project risks.

### [A Job Creator and Economic Catalyst with Bipartisan Political Support](#)

At Texas Central, we are very proud and humbled to have earned the support of mayors, legislators and other elected officials from all over the state and nation, including Houston Mayor Sylvester Turner, Dallas Mayor Eric Johnson, Fort Worth Mayor Betsy Price, just to name a few. And, without the strong bipartisan support of leaders in congress like Congresswoman Eddie Bernice Johnson, Congressman Colin Allred and Congressman Seth Moulton on this Committee as well as Congresswoman Kay Granger this project would not be ready to go today. Their hard work and support have been critical to the continued success of the project.



The Texas High-Speed Train not only enjoys strong support across the US on local, state and national levels, it also has geopolitical importance. The project has secured development capital investment from Japan, 22 Texan families looking to leave a positive legacy for the State and the country, as well as other American investors. All of this has paid for the permitting and de-risking of the project, without any state or federal funding. We also expect significant participation of banks from Japan, Italy and Spain, apart from the possibility of accessing federal financing. These countries represent important partners in this project and have extensive high-speed rail networks of their own that allow them to inject significant experience and knowledge into the project. Texas Central is bringing together the world's high-speed rail expertise right here in the US. Moreover, there is MUCH AMERICAN expertise in high-speed rail all around the world and we are bringing many of these experts home to TEXAS.

While we are delighted to have worldwide support for the project, Texas Central is an American company and we are committed to employing US manufacturers and suppliers. We expect to inject more than \$12 billion into labor and product costs to build the system, including utilizing 1,100 miles of steel rail, 600,000 tons of rebar and other steel products totaling more than 1 million tons of steel altogether supplied by US Steel manufacturers, spending \$7.3 billion on procurement costs, and employing localized suppliers all along the 240-mile route. This project provides a unique economic opportunity for the nation that will create jobs, plant the seeds of a new industry in the US and help jumpstart the state and national economy by infusing billions of dollars into US industries.

While the goal was always to build the nation's first high-speed train, it just turned out that Texas—specifically Houston to North Texas—was the ideal spot for a train that could be commercially successful. We looked at over 90 different pairs of cities in the United States, and Houston to North Texas came out on top. There are many reasons why.

First of all, that 240-mile stretch between Houston and North Texas is in the sweet spot of “too far to drive, too short to fly.” It's also relatively flat, with less than 500 feet of elevation change—no mountains, no tunnels, no major engineering challenges. It's largely undeveloped in between, and you can connect roughly 16 million people between those two economic centers. Simply looking at this project from an economic perspective, Texas makes the most sense, both on the cost and ridership side.

The Texas High-Speed Train project is a job creator. More than 17,000 good paying and high skilled construction jobs on average for a sustained period of five years, 20,000+ US supply chain jobs from many zip codes in 37 US states that we have received quotes from, and more than 1,500 permanent jobs once in operations. An estimated 25% of these job opportunities will be concentrated in rural areas, helping to boost rural economies and bring



high-paying, high-tech jobs to these underserved areas. The project will also create many more thousands of permanent jobs in supporting industries.

To build the system, we anticipate a cost of \$24 billion for direct construction of the alignment, three stations, system equipment and installation. Total cost will depend on funding sources interest rates, risk premiums, and other factors, but we expect significant private and international investment.

We would like to thank this committee for its efforts in passing H.R. 2 to assist projects like Texas Central to access the Railroad Rehabilitation and Improvement Financing program and other potential high-speed rail initiatives. We are committed to working with the Committee as it finalizes surface transportation reauthorization legislation. We believe the private sector has a role to play and we are ready to implement this project as an example of what the private sector can accomplish.

### [A Commitment to Diversity and Inclusion](#)

Texas Central is a company that values and cultivates a diverse and inclusive workforce. At the core of this commitment is our Business and Workforce Opportunity Program (BWOP), created with a mission to recognize the value and development of small-, rural-, minority-, woman-, veteran- and disabled individual-owned businesses by offering fair and competitive opportunities to bid and participate in building and operating the Texas high-speed train. The BWOP was developed in collaboration with our stakeholders — cities, counties, workforce boards, chambers, community colleges and universities and businesses. Our program also focuses on helping businesses build capacity and mentor protege partnerships. The goals and objectives of the program requirements are embedded into all Texas Central agreements.

The program goes beyond providing opportunities to participate. The jobs created will require new skills to be developed through extensive training, new investments in workforce development and partnering with a supporting network of workforce boards, community colleges and universities, K-12, unions and employers to meet the demand. To achieve these goals, we are planning to set up a High-Speed Rail Center of Excellence and have proposed it to be housed at Texas A&M University in College Station and in coordination with the Texas A&M Transportation Institute (TTI), not far from our intermediate station in Brazos Valley. In addition, we will work with the Historically Black Colleges and Universities in Texas to provide internships and other professional positions. We are establishing an expert presence to attract supply chain companies and others to build an educational hub in Texas and serve the rest of the nation from there.



### High-Speed, Low Impact

The all-electric Texas High-Speed Train will have tremendous environmental benefits when compared to all alternatives. It will remove more than 14 million automobiles off I-45 per year, according to the Final Environmental Impact Statement, published in 2020 by the FRA. This net reduction of nitrous oxide, volatile organic compounds and greenhouse gas emissions will contribute to the nation's goal of reaching net-zero GHG emissions by 2050. High-speed rail also has a significantly smaller footprint than new highway construction as the train can move the same amount of people as a 16-lane highway while only using a fraction of the land. In fact, a high-speed rail line requires only 17 acres of land per mile to construct compared to 468 acres per mile for a new highway.

With its small footprint and significantly lower emissions per passenger mile, Texas Central will help handle Texas' growth more efficiently and relieve stress on the environment.

### Conclusion

This major infrastructure project is a result of millions of man-hours of work by hundreds of engineers, environmental specialists, scientists, surveyors and numerous other trained professionals over the past decade. It includes years of close coordination with federal agencies (including the FRA, US Army Corps of Engineers, US Fish and Wildlife Service), state and local agencies and planners, landowners and many other stakeholders to create a safe, structurally sound and solid and responsible design that takes future growth into account. We look forward to working closely with the Committee, the US Department of Transportation and the Federal Railroad Administration to make this a reality. We are ready to bring a world class high-speed rail system to the US, create jobs and help boost the economy as we all recover from the Covid-19 pandemic.

In short, **we are ready to go.**

Thank you for the opportunity to testify today.



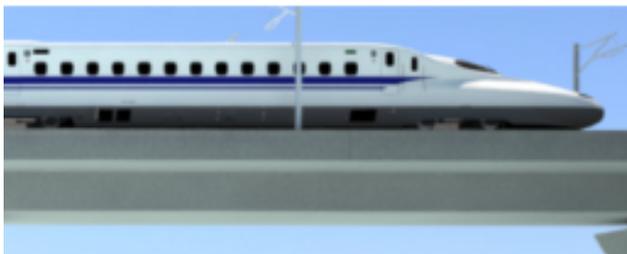


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# High Speed, **Low Impact**

Texas Central Railroad will provide a safer, more comfortable passenger experience that is far more efficient and environmentally friendly than driving or flying.

13 million passengers are projected to ride the Texas High-Speed Train per year by 2050. By taking these travelers off the roads and out of the skies, Texans can expect:



- A total energy savings of 2.46 trillion BTUs. That's enough energy to make 85 trips to the moon every year for 25 years!
- Reduced greenhouse gas emissions by 4.5 million tons or 101,000 tons per year.
- To save more than 1.2 billion gallons of gas or 65 million gallons per year.
- To save 300 million hours of travel time vs. plane or car.
- 86 million cars removed from I-45. That's 12,500 cars per day!

## ⚡ Energy Efficiency

- High-speed trains utilize regenerative braking technology to recapture energy.
- High-speed trains emit just 1/12th the amount of carbon as a typical commercial jet.
- Our technology is entirely electric.

With its lightweight design, the Shinkansen train consumes less energy than other high-speed trains.



## Population Growth/ New Mode to Meet Growing Need

- According to U.S. Census Bureau data more than 1,000 people relocate to Texas per day. This puts stress on aging infrastructure leading to congestion and less than ideal highway expansion systems in the state.
- More than 127% increase in vehicular traffic is expected on Interstate 45 between Dallas and Houston by 2035. (FEIS, Section 1.2.2.3)

Rail moves the same amount of people per hour as 16 lanes of highway.

HSR: Only requires 17 acres of land per mile to construct



VS

Highways: Require 468 acres of land per mile to construct



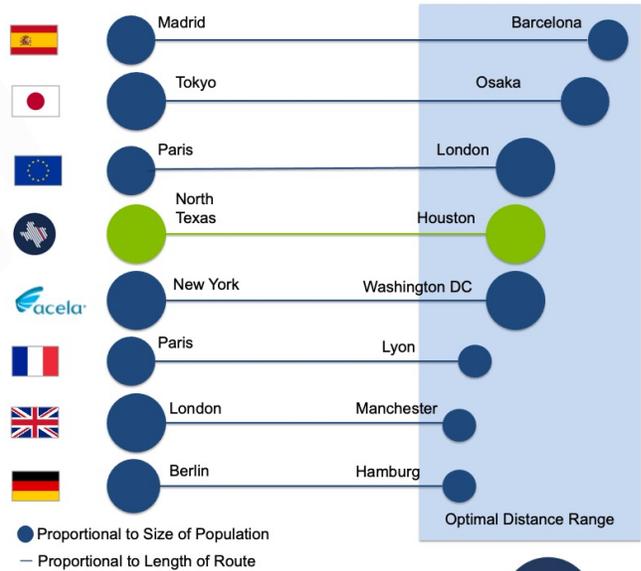
# Proven Track Record for HSR Success Globally

Texas Central shares the characteristics of profitable High Speed Rail city pairs.

## North Texas will be Receptive to HSR

### The Most Successful Point-to-point International High Speed Rail Routes:

- Are the **optimal distance** apart – far enough for substantial time savings over car, short enough to compete with air
- Connect **big cities**
- Serve cities that are **economic centers** in their regions, driving **business travel**
- Serve cities that offer a variety of **leisure opportunities** for travelers
- Have **accessible stations** in population and employment centers



PRIVATE & CONFIDENTIAL



# GLOBAL BEST FOR AMERICA'S 1<sup>ST</sup> HIGH-SPEED TRAIN

Creating A New American Industry With World Class Companies

- TEXAS CENTRAL**: Program manager will deliver the train on budget and schedule.
- BECHTEL**: Program manager will deliver the train on budget and schedule.
- Financial advisors** (Citi, MUFG) to lead capital-raising efforts.
- Systems installation partner** responsible for installing catenary; safety, signal and communication systems.
- Technology partner** responsible for trains; catenary; safety, signal and communication systems.
- Stations contractors** together will build passenger train stations.
- Civil contractor** building everything from the ground up to the train rail including viaduct and berm foundations.
- Operating partner** will run the trains, maintain systems such as engines, signals and other equipment; oversee staff and service at train stations.

Partners: **webuild**, **renfe**, **adif**, **JR-CENTRAL**, **NEC**, **HITACHI**, **MITSUBISHI**, **TOSHIBA**, **Kiewit**, **matthews southwest**, **acela**

