High-Speed Rail Among Three Transportation Modes Now Under Study

Capable of traveling up to 250 miles on a fixed schedule, High-Speed Rail’s (HSR) operational readiness is among its strengths, according to North Central Texas Council of Government’s (NCTCOG) study team leading the DFW High-Speed Transportation Connections Study.

Also under intense review are magnetic levitation (Maglev) and hyperloop technologies. Early on, conventional rail and higher-speed rail services were eliminated as possible transportation modes due, in part, to their travel times of more than 20 minutes for the 31-mile trip between Dallas and Fort Worth.

The first high-speed rail system, known as the Shinkansen, or “bullet” train, began operations in Japan in 1964. Today, Japan has a network of nine high-speed rail lines serving 22 of its major cities, carrying more than 420,000 passengers on a typical weekday. The railway has never had a passenger fatality or injury due to accidents.

High-speed rail is now under development in the United States as well. The first HSR system in the U.S., located in California, is currently under construction, but the first phase, connecting San Francisco to Los Angeles and Anaheim, is not expected to be completed until 2029. Texas Central Railroad is also planning a Shinkansen HSR line between Dallas and Houston, with a goal to be operational in 2026.
Traffic congestion relief. DFW ranks as one of the most congested urban areas in the country, according to the Texas Transportation Institute. If you commute by car, chances are you’re one of the many people stuck in the seemingly endless bumper-to-bumper traffic during the peak traffic hours. Congestion not only leads to frustrated drivers and lost travel time, but less apparent social costs, such as lost productivity, higher insurance rates, and increased air and noise pollution. High-speed rail provides an alternative to travel by automobile, makes travel times more reliable, and ultimately, saves time for those traveling between Dallas and Fort Worth.

Energy savings. According to International Union of Railways (UIC) data, high-speed rail is more than four times more energy efficient than driving in cars and nearly nine times more efficient than flying.

Environmental considerations. High-speed transportation (HST) offers a path to lower greenhouse gas emissions than other modes of transportation. If HST services can entice people out of their cars by offering convenience and speed at a low cost, this would significantly reduce carbon emissions. High-speed transportation (HST) offers a path to lower greenhouse gas emissions than other modes of transportation. If HST services can entice people out of their cars by offering convenience and speed at a low cost, this would significantly reduce carbon emissions. For example, HSR trains emit 1/12th the carbon dioxide than a Boeing 777-200 per seat, as reported by the Tokyo-Osaka line of the Tokaido Shinkansen System. The trains are also exceptionally quiet and unobtrusive to their neighbors.

Walkable Arlington

Engaging in public discussions of high-speed transportation connections study

The University of Texas at Arlington’s (UTA) newly-organized Walkable Arlington is not really at cross purposes with public transit as its name could imply.

According to one of three founding coordinators, Walkable Arlington is a coalition of residents, students, professors, and local professionals advocating for more walkable spaces and greater transportation options in the City of Arlington.

“We strongly support the development of High-Speed Transportation options in DFW,” says Anna Laura Harmjanz.

“85% of the UTA student population commutes to campus, coming from cities around the Metroplex. The high-speed connection between Dallas and Fort Worth would connect students, faculty, and employees from their residences to UTA at greater speed, reducing idle time spent in traffic.”

Harmjanz noted many college students cannot afford the costs of car ownership or may have to share cars with other family members, making a commute between Dallas, Arlington, and Fort Worth difficult if not impossible. A high-speed connection would allow students to participate in a greater variety of internships and jobs in the Metroplex while attending college.

Walkable Arlington strongly believes to have successful transit systems, cities must provide safe pedestrian and cycling infrastructure. A transit user’s trip neither ends nor begins at a transit station, but rather through other forms of micro mobility such as walking or biking. Sidewalks and bicycle lanes play a key part in connecting transit users to their stops and final destinations, allowing for more sustainable, affordable, and, ultimately, realistic transportation options.

“Our advocacy group will continue its involvement in the DFW High-Speed Transportation Connections Study through public meetings, providing feedback and recommendations representing perspectives of area residents and UTA students, faculty, and employees. Information on public meetings and opportunities for public comment will be shared within the organization and through its social media,” she said.

Connect with @WalkableArlington on Instagram
What's Happening Now

The study team is currently conducting the Level 3 Screening Evaluation—the final step before the federal environmental documentation process begins. Estimated to be complete this summer, the Level 3 evaluation involves the detailed evaluation of 10 alignments (seven near the I-30 corridor and three near SH 180) and three travel technologies (high-speed rail, maglev, and hyperloop). The criteria used in evaluating these alternatives were created and refined throughout Phase 1 of the study, and the resulting preliminary recommendations will adhere to the overarching purpose and need for the project.

Costs
- Construction (capital) cost per mile
- Annual operations and maintenance cost per mile
- Modifications to existing infrastructure

Potential Impacts to Sensitive Social, Biological, or Cultural Areas
- Total length of water body and floodplain crossings
- Acres of wetland within proposed right-of-way
- Number of potential structures displaced
- Potential parks/public recreation area impacts
- National and state historic sites potentially impacted

Potential Community Impacts
- Noise & vibration
- Visual/aesthetics

Constructability/Operability
- Potential adverse impacts to transportation systems
- Potential opportunities to improve transportation systems
- Travel time
- Required non-public right-of-way
- Technology maturity (safety systems)
- Technology maturity (operations systems)
- Technology maturity (revenue operation)
- Potential to serve as an extension to planned high-speed systems
- Potential adverse impacts to transportation systems

In the Community

We need input from everyone to explore all possibilities to make this project a reality! NCTCOG wants very much to reach out to all interested groups in the study area. We look forward to arranging presentations and/or participating in any upcoming events already scheduled where we can share information and collect input on the study. Please contact us today with your suggestions on groups which need to hear from us. Together, we can ensure all stakeholders' voices are heard.

Rebekah Hernandez
Communications Manager
682.433.0477
rhernandez@nctcog.org