DFW High-Speed Transportation Study Moves into Environmental Study

The proposed high-speed transportation project between Dallas and Fort Worth has moved into Phase 2, focusing on route alignment, potential station locations, and – most importantly – potential social and environmental impacts.

The route alignments to be evaluated run along I-30 between Downtown Dallas and Downtown Fort Worth, with a stop in the Arlington Entertainment District. The technology that will be evaluated is High-Speed Rail, which can operate at up to 250 miles per hour.

Over the next two years, a study of potential environmental effects on everything from air quality to noise, wetlands, wildlife, water crossings, and neighborhoods and businesses within the corridor will be conducted following federal guidelines. The Federal Railroad Administration (FRA) and Federal Transit Administration (FTA) will serve as the lead federal agencies during this phase.

In-Depth Studies of Two Technology Modes Continue in Phase 2

Both High-Speed Rail and Hyperloop are being studied in great depth by the engineering team leading Phase 2 of the Dallas-Fort Worth High-Speed Transportation Connections Study (DFWHSTCS).

Three other technology modes were eliminated in Phase 1 due to factors such as slower speeds, inabilities to interline with planned high-speed technologies at Dallas and Fort Worth stations, costs, alignment constraints, and infrastructure maintenance requirements.

“High-Speed Rail is safe, fast, convenient, proven and passenger friendly,” says Chris Masters, PE, Associate Vice President, HNTB, and member of the DFWHSTCS team. “Stations create major centers of multimodal interconnectivity and development of great importance to our region.”

High-Speed Rail is a success story in and of itself, with thousands of
the National Environmental Policy Act (NEPA) study, while NCTCOG will continue to monitor the real-world readiness of cutting edge Hyperloop technology for future consideration.

“This will be a continuation of a comprehensive study to ensure

“We’re following an existing transportation corridor and planning to stay predominantly within the existing right-of-way, which will minimize potential impacts.”

Ian Bryant, DFWHSTCS Project Manager

By federal law, the agency taking the lead in such projects must consider and attempt to mitigate negative environmental impacts.

President Nixon signed NEPA into law Jan. 1, 1970. It requires federal agencies to assess the effects of their proposed actions prior to decisions. Every federal executive branch agency – including the transportation, interior, and energy departments, and their agencies such as the Environmental Protection Agency (EPA), FRA and FTA – is required to implement NEPA.

When we are done, the public can be assured this project was subjected to an exhaustive review. High-speed transportation already is in use around the world and helps create more sustainable, cleaner, efficient, and cohesive communities,”

Michael Morris, PE, Director of Transportation, North Central Texas Council of Governments

electred officials, resource agencies, and community groups and organizations. “We have collected substantial public comment, and the public will continue to have every opportunity it wishes to engage with this project,” Morris said.

The Dallas-Fort Worth High-Speed Transportation Connections Study (DFWHSTCS) has been underway since mid-2020. The Regional Transportation Council (RTC) is NCTCOG’s transportation policy board. In mid-2021, the RTC approved moving the study to Phase 2, with the focus on an alignment along the existing I-30 corridor and the consideration of both High-Speed Rail and Hyperloop technologies.

In Phase 1, the study identified multiple possible locations for an Arlington station, and multiple prospective sites for the Fort Worth station in and around the city’s Central Business District. A location of the Dallas station has already been determined. The study team also eliminated Conventional Rail, Higher-Speed Rail, and MAGLEV from consideration, leaving High-Speed Rail and Hyperloop. High-Speed Rail – commonly known as the Hi-speed Bullet train – has been in operation for decades in Asia and Europe. Hyperloop technology is still in development, but transport planners envision a high-speed transportation loop connecting Houston, Dallas, Arlington-Fort Worth, Austin, San Antonio, and the Rio Grande Valley.

“High-speed transportation, whether High-Speed Rail or Hyperloop, is the way of the future for the state,” Morris said. “This mode of travel connects distant, dense urban areas with service that is easy to use and affordable. A day trip to major Texas cities from North Texas becomes much easier to imagine. This will be a great boost to economic activity and business in the state.”

The ability to move cargo is not a factor influencing this project. “Our lead federal agency. If Hyperloop is not ready, then it won’t be used,” Masters said.

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This united focus provides the resources and scrutiny necessary to develop regulatory design and safety standards benefiting the entire industry,” Masters said.

“The timeframe for Hyperloop technology readiness and the DFWHSTCS project are not far apart,” he continued. “It takes time to prepare a project for final delivery, and likewise, it takes time to develop, test and prove a technology. In this case, these timelines may end up aligning.”

Masters emphasized that by monitoring the development of Hyperloop technology and taking only High-Speed Rail through the NEPA process at this time, the connections project will not be an investment in unproven technology. “NCTCOG will environmentally clear this project for the transportation technology approved for advancement by the lead federal agency. If Hyperloop is not ready, then it won’t be used,” Masters said.

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“This project, if implemented, ultimately benefits everyone.”

As part of the environmental study, NEPA requires the lead federal agency to consider and compare the impacts of not doing the proposed project – the “no-build alternative” – to those of doing the project, or the “build alternatives.”

Under NEPA, impacts could be found in the transportation network, land use and economic development, neighborhoods, visual/aesthetics, air quality, noise and vibration, ecosystems, water, historic and archaeological resources, park land, public safety and security, and utilities, among others.

Tradeoffs will be considered. Limited noise generated by a rail service, for example, can be offset by resulting reduction in vehicular congestion on highways, with no mitigation necessary. If mitigation is determined to be necessary, engineering structures can limit noise and vibration.

“We’re following an existing transportation corridor and planning to stay predominantly within the existing right-of-way, which will minimize potential impacts,” Ian Bryant, project manager for the HNTB infrastructure design firm and member of the DFWHSTCS team, said. The lead agency must seek and consider feedback from affected agencies, immediate stakeholders, and the public.

“We are done, the public can be assured this project was subjected to an exhaustive review,” Morris said. “High-speed transportation is already in use around the world and helps create more sustainable, cleaner, efficient, and cohesive communities. It has the chance of being a boon to this economy, a real driver of economic development.”

Arlington’s Entertainment District Recognizes Importance of High-Speed Connectivity

In October, the DFWHSTCS team hosted four open houses in the major cities along the corridor: Dallas, Grand Prairie, Arlington, and Fort Worth.

“We were excited to work with the North Central Texas Council of Governments and make Globe Life Field available for a public open house,” said Rob Matwick, Texas Rangers Baseball Club’s Executive Vice President, Business Operations. “A few years ago, I was invited by the City of Arlington to serve on its Transportation Advisory Committee, which looked at both traditional and emerging technologies to serve the transit needs of our community.”

“The high-speed transportation discussion is an important piece of the equation for the Rangers and all of our partners in Arlington’s Entertainment District,” Matwick continued. “We were glad to host members of the community to give citizens a chance to learn more, ask questions and provide input.”

The district includes the Rangers, Dallas Cowboys, Six Flags Over Texas, and Texas Live! with its eight venues and public spaces totaling 200,000 square feet as well as Live! by Loews Hotel. Arlington City Council this fall approved a new $550 million convention center and hotel project and Phase 2 of The Cordish Companies’ investment in Arlington with office, residential, parking, and additional restaurants totaling $810 million.

The 49th largest city in the U.S. boasts more than 14 million visitors a year, making it the top tourist destination in the region. Arlington is the only city in the country to host the Super Bowl, NBA Finals, and World Series in one year.

“Given the phenomenal successes and popularity of sports venues in Arlington, high-speed transportation connections like this are an important part of our state’s Texas Triangle connectivity,” said Lamers.

Under consideration at this time are three different locations for a possible station in Arlington near I-30.

Mitigation can include:

- Not taking certain action
- Limiting the degree of the action and implementation
- Repairing, rehabilitating, or restoring the affected environment
- Preservation and maintenance during the term of the action
- Replacing or providing substitute resources or environments

“Recent public open house at Globe Life Field”

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COMMUNITY SPOTLIGHT

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Research and well-founded data and analysis are essential for consideration of high-speed technologies replacing personal and commercial vehicles on roadways, according to the Arlington Conservation Council (ACC) leadership.

Their comments came during a virtual meeting discussion with the Dallas-Fort Worth High-Speed Transportation Connections Study (DFWHSTCS) team. During Phase 1 of the project, approximately 150 meetings were held to encourage stakeholders and the public-at-large to engage at the outset of the three-year study. “By reaching out as we have been doing, we are gaining valuable observations and insights on the front-end of such a dynamic game-changer,” said Rebekah Gongora, Communications Manager of the North Central Texas Council of Governments, the project sponsor.

“ACC works to protect Arlington’s natural environment through education, community service, and advocacy for a sustainable future. Members voted climate change ACC’s #2 2021 priority, and EPA calls transportation the largest greenhouse gas contributor in the U.S. at about 29 percent,” said Dick Schoech, nonprofit president and retired University of Texas social worker.

“If the U.S. is to have a sustainable climate, we must reduce this number. Well-researched data that drive options for high-speed transportation are essential to help ensure our climate is sustainable,” he continued.

Arlington has grown to be the 49th largest city in the nation, he noted. “As we continue to grow, our city becomes more crowded, our air is dirtier, our water supply shrinks, and our hope for adequate open spaces lessens with each development,” Schoech said. “For years, we’ve worked with other local nonprofit groups and city officials to make things better right here at home. There’s a lot to do, but we strive to make a crucial difference.”

Introducing NCTCOG-nition!

As Phase 2 begins, the DFWHSTCS team is sharing a series of videos highlighting the remaining technology modes: High-Speed Rail and Hyperloop. The NCTCOG-nition series will include clips from various technology providers and demonstrate functions of the two modes, including everything from speed, ability to carry cargo, station operations, and everything in between. Our first edition highlights the technology readiness of both High-Speed Rail and Hyperloop.

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 are looking 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.

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