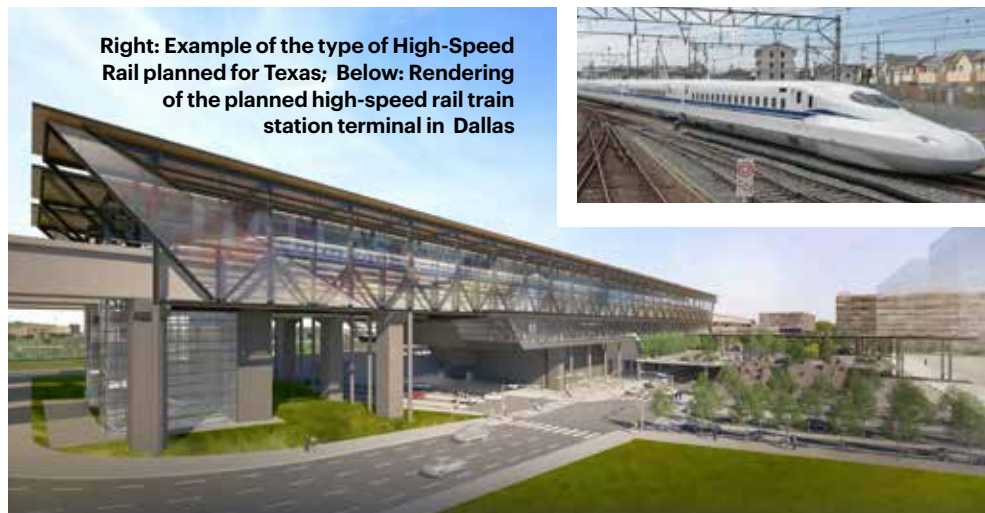


High-Tech Travel

The Dallas Region is on the cutting edge of some of the world's most innovative transportation solutions. These technologies will allow DFW to remain one of the least-congested major cities in the world, now and far into the future.

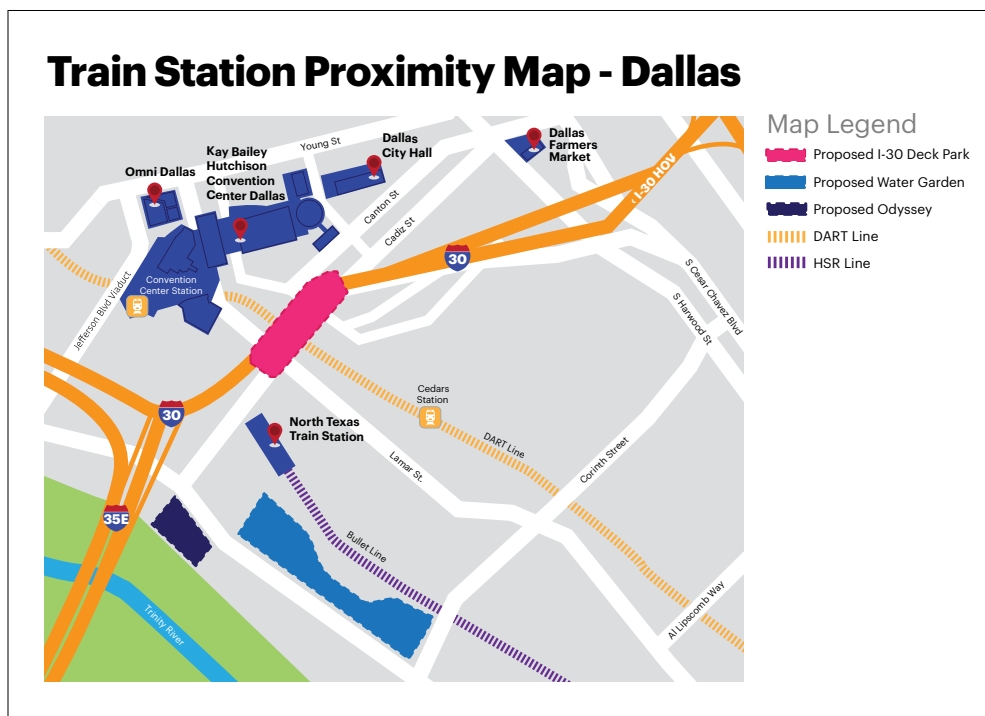
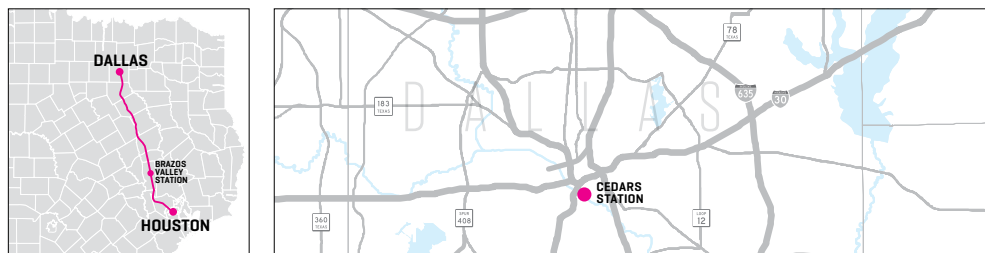
From deployment of tested and trusted high-speed rail technology, to design and testing of autonomous vehicles, Dallas continues to seek out more efficient, effective and sustainable transportation options for its residents and workers.



Right: Example of the type of High-Speed Rail planned for Texas; Below: Rendering of the planned high-speed rail train station terminal in Dallas

High-Speed Rail

The Dallas-Fort Worth region is leading all domestic metros in the development of the first truly high-speed railroad in the U.S. Texas Central is building a 205-mph Dallas-Houston train line that will cut the current commute time from three to four hours by car to less than 90 minutes. Construction is expected to start once global financial markets stabilize and the federal approvals process is complete. It will spur multi-modal rail-station development and is predicted to boost transit ridership, car-sharing, and other transportation opportunities in both metros.



Source: Texas Central



Photo: Hillwood

AllianceTexas Mobility Innovation Zone

Hillwood's AllianceTexas in north Fort Worth is home to the Mobility Innovation Zone (MIZ). The MIZ offers mobility companies full access to an unparalleled testing ecosystem, resources, and partnerships essential to comprehensively test, scale, and commercialize their technologies. Work in the MIZ is focused on the autonomous movement of freight and goods via air and surface.

Autonomous Vehicles, Drones, EVTOL's

Texas' less restrictive regulations and the Dallas Region's business-friendly environment have set the stage for the early adoption of autonomous technologies.

In 2020, Dallas Fort Worth International Airport (DFW) introduced an EasyMile driverless shuttle service to seamlessly transport passengers from the remote south parking lot to the airport terminal.



Most of the major autonomous trucking companies are operating in DFW, including Aurora, Kodiak Robotics, TuSimple, and Waymo. Aurora is testing its autonomous fleet, which features its FirstLight Lidar technology. In 2020, Kodiak Robotics, which operates out of Lancaster in Southern Dallas County, completed over 800 miles of driving on I-45 between Dallas and Houston without intervention from a safety driver.

Dallas-Fort Worth has become a major player in the air taxi and electric vertical takeoff and landing (EVTOL) space. Bell, which is headquartered in Fort Worth, is building and testing its evtols here. Triumph Group partnered with Jaunt Air Mobility to design, develop, certify, and build a full-scale electric vertical takeoff and landing aircraft in Red Oak. Other manufacturers and operators, such as Hyundai Urban Air Mobility and Astro Aerospace, are also in the region.

AT&T and Verizon have both begun wide-scale 5G technology deployments, a critical element for connecting vehicles of all types to one another and to the infrastructure that supports them.

The FAA has granted the University of Texas at Arlington a Certificate of Authorization (COA) to fly in the airspace around their Riverbend Campus, giving researchers and affiliated faculty a unique venue for advancing the technology.



Illustration: Andrey Suslov via iStock

Investing in Tomorrow's Mobility Technologies Today

The North Texas Center for Mobility Technologies (NTCMT) brings coordinated expertise of DFW research universities to tackle global mobility technology challenges.

The center handles challenges in areas such as: autonomous vehicles, 5G, electric vertical takeoff and landing (EVTOL), electric motors, micro mobility, drones, Lidar, radar, machine vision, freight, drones, first mile, last mile, networking, network splicing, object avoidance, multi-modal, on-demand mobility, personal mobility, fuel cells, battery, motor controllers, route planning, and more.

The center's objectives include:

- Providing access to a cutting-edge research and development network of and for mobility companies, universities, not-for-profits, municipalities, and public agencies;
 - Attracting industry and academic talent to North Texas;
 - Developing transportation-related research capabilities within North Texas universities;
 - Facilitating communication and collaboration among North Texas universities in pursuit/execution of mobility related grants;
 - Facilitating university-public sector partnerships on transportation-related projects;
 - Facilitating mobility and transportation internships for workforce enhancement
 - Serving as a catalyst for building similar regional university networks.
- Organizations working with NTCMT use multi-university partnerships and leverage match funding to further the development of their mobility solutions.
- Seed funding from the North Central Texas Council of Governments (NCTCOG) and participating universities stretch research dollars. While there is no floor on project size, multiple awards are expected with a total ceiling of \$2M per year.