

# FUTURE MOBILITY

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, as noted by the TomTom Traffic Index, now and far into the future. From deployment of tested and trusted high-speed rail technology, to design and testing of options straight out of science fiction like the hyperloop and flying taxis, Dallas continues to seek out more efficient, effective and sustainable transportation options for its residents and workers.



## HIGH-SPEED RAIL

Dallas is leading all domestic metros in the development of the first truly high-speed rail in the U.S. Texas Central Partners is building a 186-mph Dallas-Houston train line that will cut the current commute time from three to four hours by car to only 90 minutes, about the same duration as air travel. This project—expected to begin operations in 2023—will spur multi-modal rail-station development and is predicted to boost transit ridership, car-sharing, and other transportation opportunities in both metros.



PHOTO: CITY OF ARLINGTON

## AUTONOMOUS VEHICLES

DFW is home to the nation's first autonomous municipal public shuttle, EasyMile, which connected crowds to public entertainment venues, including Six Flags Over Texas, AT&T Stadium, and Globe Life Park in Arlington. That service retired in the fall of 2018 and has been replaced by three free, self-driving Drive.AI vans, which operate on the streets of Arlington from 11 a.m. to 4 p.m. five days per week. Drive.AI has also partnered with the City of Frisco, where it operates a fully functioning on-demand autonomous vehicle shuttle near Hall Park and The Star. Meanwhile, local startup Vinli is advancing connected automobile technology that will lead to safer roadways in the near future. AT&T and Verizon have both begun wide-scale 5G technology deployment, a critical element for connecting vehicles of all types to one another and to the infrastructure that supports them.



## UBER ELEVATE, VERTIPTS, DRONE DELIVERIES

Uber is working with Fort Worth-based Bell Helicopter and Dallas-based Hillwood to accelerate the eventual large-scale deployment of electric vertical takeoff and landing vehicles (VTOLs)—the air taxi. DFW is one of a handful of test markets. The first test route between Frisco's The Star and Dallas-Fort Worth International Airport will lay the path for making DFW a world leader in air taxi service. With the development of new vertiports, drone deliveries will also be possible. Already, 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.



## VIRGIN HYPERLOOP ONE

Virgin Hyperloop One recently announced 10 global finalists for the development of a new hyperloop route, and Texas was included in that list. In the Hyperloop Texas proposal, the tube infrastructure will be elevated along a 640-mile route, connecting Dallas-Fort Worth, Austin, Houston, San Antonio, and Laredo. Not only will this technology provide mind-blowing travel time savings, but will also open up the enormous potential to move cargo efficiently and quickly from port to market. The Dallas office of AECOM is leading the effort on behalf of Texas.

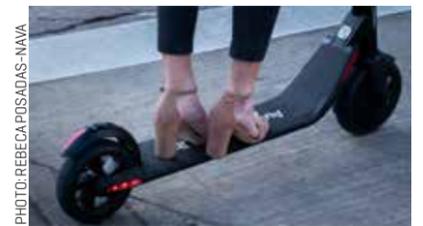


PHOTO: REBECCA POSADAS-NAVA

## LAST-MILE TRANSPORT OPTIONS GROWING IN DALLAS

Hyperloops, bullet trains, and even flying taxis won't solve the persistent quandary of last-mile travel. Fortunately, the number of these often overlooked travel options continues to expand in Dallas.

In December 2018, roughly 2,000 UBER-owned Jump electric bikes were permitted for the streets of Dallas, along with 2,000 Jump electric scooters. They join thousands of electric scooters already deployed in Dallas by Lime, Bird, and Razor.

As of February 2019, there were more than 2,300 Lime electric scooters on Dallas streets, more than 300 Bird scooters, and nearly 600 Jump scooters, according to the City of Dallas. Razor electric scooters were in the process of redeploying at the time of the city survey.

These vehicles mostly supplanted 20,000 manually powered, dockless bikes owned by LimeBike, Ofo, Spin, MoBike, and VBikes.

Those not up for mounting electric bikes or scooters might opt for Dallas-based efrog shuttles, which, since 2010, have transported people across downtown Dallas and surrounding districts, including Deep Ellum and Uptown. The six-seat, enclosed electric vehicles offer free rides and are funded by display advertising, corporate services, and city tours. Riders are encouraged to tip their drivers.

The region's mass-transit provider, Dallas Area Rapid Transit, has developed the GoPass app, allowing users to track incoming buses and trains in real-time and to pay for rides without carrying cash or cards. The app also estimates commute times and locates electric scooters, restaurants, and other points of interest. The GoPass also offers Uber and Lyft options.

One Dallas startup firm, Alto, has received funding to disrupt the conventional rideshare market with a safety-minded orientation. From vehicle standards to employee vetting and training, Alto strives to offer a premium, professional, and customizable ride share experience.