

U.S. Postal Service mail, packages are headed to Dallas by self-driving truck

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Before letters end up in your mailbox and packages land on your doorstep, many travel hundreds or thousands of miles in the back of a truck. Now, the United States Postal Service is testing what it would take to shuttle that cargo without a driver in the front seat.

Recently, self-driving trucks from TuSimple started driving mail from Phoenix to Dallas. The nation's mail delivery agency hired the San Diego-based company for a two-week pilot.

The trucks will make a 22-hour journey between distribution centers in the two cities. They will travel more than 1,000 miles each way. TuSimple will use three trucks to make a total of five trips. A safety engineer and driver will be on board to monitor the truck's performance and step in, if needed.

It's one of several pilots in Texas that are testing how vehicles driven by software, cameras and sensors instead of people could cut down on labor costs, boost fuel efficiency and make it easier for people and cargo to get around.

A fleet of driverless orange vans from Silicon Valley-based Drive.ai has picked up passengers in Arlington and Frisco. A free autonomous shuttle previously ferried people around Arlington's entertainment district. And researchers at Texas A&M have tested how platooning commercial trucks—using one driver in an 18-wheeler to control a second truck that travels close behind—could save money.

But there are numerous hurdles before autonomous vehicles become mainstream, from winning the public's trust to bringing down costs. The city of Frisco recently ended a pilot with Drive.ai, saying it was popular with riders, but too expensive. A crash of an Uber self-driving car that killed a pedestrian last year in Arizona raised concerns among some that the vehicles are simply too dangerous.

Robert Brown, TuSimple's director of [public affairs](#), said safety is the company's "North Star." The truck's cameras and sensors can see about 1,000 meters and 30 seconds ahead, so it knows if it needs to slow down or change lanes, he said.

Still, he said, he can understand why the public might initially be apprehensive about a 40-ton truck barreling down the highway.

Self-driving trucks could become an alternative to staffing long-haul and overnight routes with people. A shortage of truck drivers has accelerated experimentation with technology. That driver shortage could reach 175,000 by 2024, according to the American Trucking Association.

The public's habits are driving the need for the trucks, too, Brown said.

"As all of us click on a one- or two-day delivery, it puts more strain on a system that's already strained," he said.

USPS processes and delivers 484.8 million pieces of mail each day. In a statement, it said the pilot is "just one of many ways the Postal Service is innovating and investing in its future."

"We are conducting research and testing as part of our efforts to operate a future class of vehicles which will incorporate new technology to accommodate a diverse mail mix, enhance safety, improve service, reduce emissions, and produce operational savings," it said in a statement.

USPS would not say how much it is paying TuSimple for the pilot. It does not receive tax dollars for operating expenses, so it relies on the sale of postage, products and services.

The USPS pilot is TuSimple's first test in Texas and its longest trip so far. The more than 200-person company has done most of its testing in Arizona, another state with a regulatory environment that's friendly to autonomous vehicles. Most of those routes have been two to four hours long, Brown said.

He said TuSimple has worked with 15 customers, including Fortune 500s companies and household names. It currently has its own fleet, but eventually plans to sell its software to truck manufacturers.

He said one of the company's biggest challenges has been designing sensors and hardware so they can weather millions of miles on a fast-moving, heavy-duty truck.

With the USPS pilot, he said TuSimple hopes to learn more about how the trucks perform and how much money they could save. The trucks don't brake or accelerate frequently, like people do, so that adds up to fuel savings, he said.

In the future, the trucks could reduce congestion, he said. Without a person in the cab, they could drive during off-peak times when there are fewer cars on the road.

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