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Transit district plans study on autonomous vehicle technology in Northern New Mexico

By Robert Nott rnott@sfnewmexican.com Mar 19, 2024



Driver Neil Garinger, left, speaks with an Española-bound rider boarding a North Central Regional Transit District Blue Bus Sheridan Street in 2015.

New Mexican file photo

Driverless buses on the rural roadways of Northern New Mexico?

While fully autonomous, rider-only vehicles are years away, test routes with operators in the driver seats could be just around the corner.

The North Central Regional Transit District, which operates the Blue Bus transportation system, is preparing to launch a study on the feasibility of autonomous vehicle use in public transit, with a goal of determining whether the area is suitable for a pilot program.

It has teamed up with a Washington, D.C.-based not-for-profit organization, the Community Transportation Association of America, for an initiative largely driven by nationwide driver shortages.

Challenges in recruiting and retaining bus drivers "make it difficult to provide service plan goals," which has led to a reduction in service in some areas, said Bryce Gibson, the transit district's planning and projects manager.

The study is an opportunity to "harness a new technology to meet some of these ongoing demands," Gibson said.

The Community Transportation Association's National Center for Applied Transit Technology will conduct the study, which could be completed before the year's end.

Though, Gibson noted the initiative is still in the "exploratory" phase.

Autonomous vehicles use a combination of artificial intelligence software and sensors to navigate and drive. While some studies cite public concerns about the use of such vehicles, others predict they will grow in popularity as the technology improves.

Gibson said the transit district wants to know if "five, 10 years down the line the technology is viable" to incorporate autonomous vehicles into public fleets.

Among the factors the study will consider are safety concerns and cost effectiveness for both transit systems and riders.

While a major goal of the study is to determine if autonomous vehicles could help the North Central Regional Transit District alleviate driver shortages, that would take time to accomplish, as many autonomous vehicles still have an operator on hand to take the wheel if things go awry.

"We do anticipate where the technology exists today that someone will have to be on board in case there is an emergency," Gibson said.

That's the case in Arlington, Texas, where four autonomous vehicles are deployed with operators on board, said Ann Foss, a planning and program manager in the city's transportation department.

"We want there to be a person who riders can ask questions of and get more comfortable with the technology," she said.

Eventually, however, the city wants to test "rider only" routes for its autonomous minivans, which can carry up to five passengers.

One of the four vehicles can accommodate a rider in a wheelchair, Foss said.

Educating the community about the potential for autonomous vehicles to expand service areas is key to garnering community support, she said.

"Really think about your usage carefully," she advised. "Make sure you define a service area where there's a need."

Arlington first piloted the autonomous vehicle component of its public transit system in 2021 with the help of a federal grant. The city has hired a Michigan-based business, May Mobility, to supply the vehicles and train the operators, Foss said.

The autonomous vehicles have not led to any accidents or injuries in Arlington, but there are times when they move through areas with heavy pedestrian traffic and slow down "to a crawl," Foss said. That's when their human operators on board switch them to manual drive and take over.

A memorandum of understanding between the North Central Regional Transit District and the Community Transportation Association of America says other local transit systems, such as Santa Fe Trails, the city of Santa Fe's bus system, and Atomic City Transit in Los Alamos, also are participating in the study.

But a city official indicated Santa Fe isn't yet on board to deploy driverless vehicles.

Transit Director Gabrielle Chavez said it's too early to say whether the city will bring autonomous vehicles into its fleet or whether there are any concerns about the initiative. Much depends on the study's findings.

If the study suggests it's feasible to proceed with driverless routes, "we would like to focus on downtown" and use smaller autonomous vehicles, Chavez said.

The National Center for Applied Transit Technology has until June 2025 to complete the study, but Director Andrew Carpenter wrote in an email, "We hope to determine by mid-year whether or not a pilot project would make sense in the short-term."

His agency has found about 10 autonomous vehicle pilot programs in cities throughout the nation, he wrote, adding some have ceased operations due to funding issues.

His group will be "looking at public AV deployments and the lessons that those transit agencies learned," he wrote. "We'll combine that with our knowledge of transit operations to evaluate if, as the technology stands, there are any services that the technology could provide" for the North Central Transit District.

Takeaways

The North Central Regional Transit District has entered a memorandum of understanding with the Community Transportation Association of America to conduct a study on the use of autonomous vehicles in public transit.

The National Center for Applied Transit Technology will implement the study in tandem with a number of other agencies, including the Santa Fe Trails bus system in the city of Santa Fe.

The project, which won't involve the use of driverless vehicles but could lead to a pilot program, is largely aimed at addressing a driver shortage.

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