

Mobility Innovation - Transit Bus Automation Market Assessment

The emerging automated transit bus market has received enthusiastic media coverage. There are important distinctions between prototype systems and products that are available for routine use in the marketplace, which poses a challenge to transit stakeholders because it requires disentangling early pilot projects with lessons from ready-to-deploy systems that can meet service expectations.

FTA's [Transit Bus Automation Market Assessment](#) (October 2021) provides objective information and context on the state of the market to inform public sector decision-makers and others interested in hosting automated transit bus pilots and demonstrations. It will provide useful context and communicate a useful depiction of the state of the industry with respect to the availability, capabilities, and limitations of automated transit bus technologies. The first Transit Bus Automation Market Assessment was released in 2019 and updated in 2020.

Findings from the report include the following:

- **Maturity** is at a relatively early state; systems that exist are prototypes rather than commercialized products.
- **Media coverage** is often ahead of actual technology development.
- **Transferability of technology** from other vehicle formats and applications is a challenge.
- **Scalability** is constrained due to low volumes, high customization, and perceived lack of interest.
- **Joint procurement** is an option transit agencies are exploring to stimulate development.
- **On-board operators** will likely be retained by transit agencies to provide an official staff presence on vehicles for the foreseeable future.

FTA provides resources documenting automated transit bus demonstrations and pilots in its [Transit Bus Automation Quarterly Updates](#). Information on FTA-funded and managed efforts can be found on FTA's [Demonstrations & Pilots](#) webpage, and more information about FTA's research approach is available in the [Strategic Transit Automation Research \(STAR\) Plan](#).

*Automated emergency braking test on
Pierce Transit bus at Virginia Tech
Transportation Institute (VTI)
Smart Road test track*

Photo Credit: USDOT Volpe Center, 2019

