

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

[Docket No. FTA-2017-0025]

Removing Barriers to Transit Bus Automation

AGENCY: Federal Transit Administration (FTA), DOT

ACTION: Notice; Request for Comments

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**SUMMARY:** The Federal Transit Administration (FTA) seeks public comment regarding current or potential regulatory or other policy barriers to the development, demonstration, deployment, and evaluation of automated transit buses and related technologies for Society of Automotive Engineers (SAE) automation levels 3 through 5. For purposes of this notice, “bus” is defined broadly to consider a range of sizes, vehicle platforms and configurations, and passenger capacities, and could include both traditional and novel vehicle designs (e.g., full-size city buses, articulated buses, small shuttles, etc.). “Bus” includes bus rapid transit.

**DATES:** Comments must be submitted by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. FTA will consider late-filed comments to the extent practicable.

**ADDRESSES:** Please submit your comments by only one of the following methods, identifying your submission by docket number FTA-2017-0025. All electronic submissions must be made to the U.S. Government electronic site at

<http://www.regulations.gov> .

- 1) Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the online instructions for submitting comments.

- 2) Mail: Docket Management Facility: U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building, Ground Floor, Room W12-140, Washington, DC 20590-0001.
- 3) Hand Delivery or Courier: West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, between 9 a.m. and 5 p.m. Eastern time, Monday through Friday, except Federal holidays.
- 4) Fax: 202-493-2251.

Instructions: You must include the agency name (Federal Transit Administration) and Docket number (FTA-2017-0025) for this notice at the beginning of your comments. Submit two copies of your comments if you submit them by mail. For confirmation that FTA received your comments, include a self-addressed stamped postcard. Note that all comments received will be posted without change to [www.regulations.gov](http://www.regulations.gov) including any personal information provided and will be available to internet users. You may review DOT's complete Privacy Act Statement published in the Federal Register on April 11, 2000 (65 FR 19477).

Docket: For access to the docket to read background documents and comments received, go to [www.regulations.gov](http://www.regulations.gov) at any time or to the U.S. Department of Transportation, 1200 New Jersey Ave SE, Docket Operations, M-30, West Building Ground Floor, Room W12-140, Washington, DC 20590 between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** For questions, contact Steve Mortensen, Office of Research, Demonstration and Innovation, Federal Transit

Administration, 1200 New Jersey Ave. SE, Room E43-422, Washington, D.C., 20590,  
phone: (202) 493-0459, fax: (202) 366-3765, or e-mail, [Steven.Mortensen@dot.gov](mailto:Steven.Mortensen@dot.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Overview**

Transportation currently is undergoing a transformation. As traveler preferences and needs recently have evolved and continue to change, so have the capabilities of emerging transportation technologies and, more importantly, the operational concepts defining how those technologies will be deployed in our communities.

Motor vehicle automation (both as a technology platform and service model) has become the most talked about development for surface transportation in recent times. Many industry stakeholders and observers anticipate and expect that public transportation will have a significant role in this new space, as garnered from transit stakeholders during FTA preliminary research on the subject. Certain operational applications such as circulator or first mile/last mile service are clear instances where the use of automated motor vehicles could play a very effective role, based on transit stakeholder input and preliminary benefit-cost information on these service types. Circulator service is regular service within a closed loop, typically on a fixed route, and may be found in business parks, retirement communities, college campuses, downtowns, etc. First mile/last mile service provides service between high-capacity fixed-route service, such as rail transit and bus rapid transit, and a traveler's origin and/or destination, usually within a radius of three miles and often in an area of low-density development.

Preliminary findings from FTA research are supported by a National Highway Cooperative Research Program study on automated transit (Gettman, Douglas, et al.

2017. NCHRP Project 20-102 (02), Project Report Document 239, *Impacts of Laws and Regulations on CV and AV Technology Introduction in Transit Operations.*) (see also <https://www.nap.edu/download/24922#>) which suggest that non-technical issues may present challenges or barriers to the development, demonstration, deployment, and evaluation of automation technologies in transit bus applications. For example, existing National Highway Traffic Safety Administration Federal safety requirements and vehicle test procedures generally do not anticipate a fully driverless vehicle, and FTA procurement and other requirements could limit product availability for automated transit buses, particularly for automation levels 3 through 5.

FTA seeks comments from stakeholders, including the disability community, to better understand regulatory and policy barriers and challenges to development, demonstration, deployment, and evaluation of automation systems in the transit industry. Information from this RFC will help inform FTA's approach to automated transit buses, including determining whether to pursue potential modifications of FTA regulations, guidance, and internal practices, and may also help inform any future legislation.

This notice is a request for comments and information only. It is not a solicitation for project proposals. Submission of any information in response to this notice is voluntary. The Government will not pay for any effort expended in responding to this notice.

## **II. Scope and Submission of Comments**

The goal of this notice is to better inform FTA regarding current or potential regulatory and other policy areas, and procedures or actions that may slow or prevent the development, demonstration, deployment, and evaluation of automated transit buses and

related technologies. For purposes of this notice, “bus” is defined broadly to consider a range of sizes, vehicle platforms and configurations, and passenger capacities, and could include both traditional and novel vehicle designs (e.g. full-size city buses, articulated buses, small shuttles, etc.). “Bus” also includes bus rapid transit.

FTA requests comments from stakeholders, including the disability community, concerning technologies spanning automation levels 3 through 5 as defined in the SAE standard J3016\_201609 (see [http://standards.sae.org/j3016\\_201609/](http://standards.sae.org/j3016_201609/)) and as used in the National Highway Traffic Safety Administration *Automated Driving Systems (ADS): A Vision for Safety 2.0* guidance.

In particular, FTA seeks comments with respect to the following areas of interest:

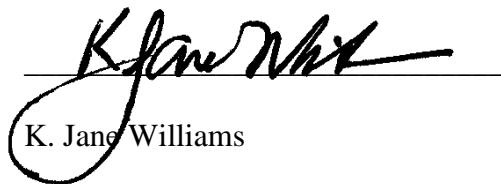
- A. Are there existing FTA statutes, regulations, or policies that may present a challenge or barrier to the development, demonstration, deployment, or evaluation of automated transit buses? If so, please specify or describe these challenges, and provide proposed resolution, if possible.
- B. Are there other Federal statutes, regulations, or policies (e.g., Federal Motor Vehicle Safety Standards, etc.) that may present a challenge or barrier to the development, demonstration, deployment, or evaluation of automated transit buses? If so, please specify or describe these challenges, and provide proposed resolution, if possible.
- C. Are there any specific regulatory barriers related to small business that DOT/FTA should consider, specifically those that may help facilitate small business participation in this emerging technology?

D. Are there other regulatory, policy, or legislative challenges or barriers not otherwise specified above, which may impede development, demonstration, deployment, or evaluation of automated transit buses? If so, please specify or describe these challenges, and provide proposed resolution, if possible.

Where applicable, indicate the level(s) of automation impacted by the statute, regulation, or policy. Please note FTA is not seeking comments pertaining to systems without an automated driving aspect (e.g., driver warnings and alerts), unless the system is evolving to include automation levels 3 through 5 in the foreseeable future. Please also note that this notice is not seeking comments related to rail fixed guideway systems or personal rapid transit systems. Interested parties are requested to respond to this notice in writing as soon as possible but not later than [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

For information about the Federal Transit Administration, please refer to the FTA website at <https://www.transit.dot.gov/>.

Issued in Washington, DC on January 10, 2018 under authority delegated in 49 CFR Part 1.91.



K. Jane Williams  
Deputy Administrator