

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

[Docket No. FTA-2017-0024]

Research Program: Automated Transit Buses

AGENCY: Federal Transit Administration (FTA), DOT.

ACTION: Notice; Request for Comments.

SUMMARY: The Federal Transit Administration (FTA) seeks public comment regarding the current and near-future status of automated transit buses and related technologies. FTA seeks comments in particular from parties involved in the development, demonstration, deployment, and evaluation of currently available or near-market ready automated buses; systems and components that support bus automation; and ancillary systems that support non-driving bus operator functions (e.g., wheelchair securement, occupant detection, passenger information assistance, fare payment, etc.). 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-2017-0024. 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-2017-0024) 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 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 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.

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.

FTA is seeking comments and information for the purpose of determining the current state of the industry as related to automated vehicle technology in order to make more informed decisions regarding future areas of research. The intent of this request for comments is to gauge the transit industry and other sectors' ability and interest in responding to one or more near-future Notices of Funding Opportunity (NOFOs) for demonstration(s) and evaluation(s) of use cases where commercially ready technology and products could be applied to transit to provide early demonstrable results. FTA has identified transit bus automation use cases, organized into five general categories, as outlined below:

1. Transit Bus Advanced Driver Assistance Systems (ADAS)

- Smooth Acceleration and Deceleration
- Automatic Emergency Braking and Pedestrian Collision Avoidance
- Curb Avoidance
- Object Avoidance
- Precision Docking
- Narrow Lane/Shoulder Operations
- Platooning

2. Automated Shuttles

- Circulator Bus Service
- Feeder Bus Service

3. Maintenance, Yard, and Parking Operations

- Precision Movement for Fueling, Service Bays, and Bus Wash
- Automated Parking and Recall

4. Mobility-on-Demand Service

- Automated First/Last Mile
- Automated Americans with Disabilities Act (ADA) Paratransit
- On-Demand Shared Ride

5. Automated Bus Rapid Transit

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 of existing transit bus automation technology, and to assist FTA in identifying potential areas of future research. 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.

FTA requests comments for a broad range of automation technologies spanning automation levels 1-5 as defined in the Society of Automotive Engineers (SAE) standard J3016_201609 (see http://standards.sae.org/j3016_201609/). Responses to this notice will help inform FTA on the technological readiness of the transit industry to participate in demonstrations of use cases as identified above.

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

- A. What transit bus automation and supplemental technologies currently exist, and/or are being developed? Are there any ADAS, inclusive of automated actuation (e.g., as in an automated emergency braking application), currently available or soon to be available in the market? If so, please specify or describe these new systems and products.
- B. What light-duty and commercial vehicle automation technologies currently on the market or in development could be transferred or applied to transit buses?
- C. Are there any new business models or processes that may arise in response to or may accommodate transit bus automation, including, but not limited to, cross-organizational data management and exchange? If so, please specify or describe these new potential business models or processes.

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 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.

Each response should indicate which level of automation the technology or process addresses. Inclusion of existing supplemental information is welcomed and encouraged. This supplemental information could include reports, presentations, specifications, or other documentation. 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].

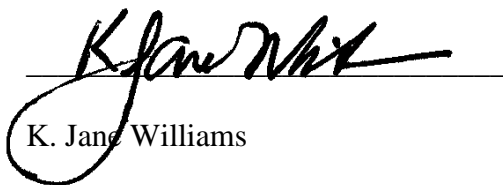
This request for comments is for information and planning purposes only, and is a market research tool to determine the availability and adequacy of potential business sources prior to determining the method of acquisition and possible issuance of a Request for Proposal (RFP) or NOFO, including the use of any non-profit organization or small business program. This notice does not constitute a solicitation for bids, quotations, and proposals, and is not to be construed as a commitment by FTA to issue an RFP or NOFO. FTA is not obligated to and will not pay for any information received from potential sources as a result of response to this notice. FTA will not pay for any materials provided in response to this notice and submittals will not be returned to the sender.

Each response should reference the docket number (FTA-2017-0024), and provide the name and contact information (company, company representative's name, phone, email, etc.) of the submitter, at a minimum.

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.

A handwritten signature in black ink, appearing to read "K. Jane Williams", is written over a horizontal line.

K. Jane Williams

Deputy Administrator