Bus Transit Automation Activity in the United States: Overview

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Introduction











Market Assessment: Overview

- Purpose to provide information on commercially available technologies and near-market technologies
- Audience includes transit agencies, and other interested stakeholders
- **Scope** is broad in terms of automation technologies and bus types
- Methods involved data collection from publicly available documentation and phone calls with industry.
- Available materials include the final report (<u>link</u>) and summary (<u>link</u>)











Market Assessment: Findings

- Media Coverage: Publicity related to new transit bus automation products or capabilities is often ahead of actual technology development.
- Costs: Technology costs are unknown at this point.
- **Transferabilit**y: Current automation technology for other vehicle types addresses use cases that may have limited applicability for transit service.
- **Scalability**: Low volumes, high customization, and perceived lack of interest from transit agency customers make developing new technology for transit buses difficult.
- Industry Activity: Bus manufacturers are working with suppliers to understand new features development timelines and creating high-level roadmaps for their introduction.
- **Needs**: There is a high degree of uncertainty regarding several technical and institutional issues, and additional work is needed in research, communication, and education.
- Importance of Pilots: Industry representatives noted that demos/pilots are needed for technological progress and understanding feasibility of transit bus automation systems.



Snapshot: U.S. Research and Demonstration Activities

- U.S. DOT
 - BUILD, ATCMTD, ADS
 Demonstration Grants, IMI, SCC
 - Peirce Transit AEB
- State and Local Governments
 - Valley Metro
 - RIDOT
 - Automated Bus Consortium
- Private Sector
 - Brooklyn Navy Yard











Strategic Transit Automation Research (STAR)

- FTA's 5-year research plan on transit bus automation
- Establishes a research and demonstration framework
- Leverages the core strengths of academia, public institutions, and private sector
- Enabling Research, Integrated Demonstrations,
 Strategic Partnerships, Stakeholder Engagement and
 Knowledge Transfer



Research Results and Reports available at:

https://www.transit.dot.gov/automation-research



U.S. DOT Access and Mobility for All Summit

- October 28, 2019
- Inclusive Design Challenge
- Complete Trip Deployment Grants
- www. transportation.gov/accessibility















Thank you! elizabeth.machek@dot.gov