FTA's Mobility on Demand (MOD) Sandbox Program

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Sustainability & Multimodal Planning Workshop



## What is Mobility on Demand?

An integrated and connected multi-modal network of safe, affordable, and reliable transportation options that are available to all



- User-focused options to improve personal mobility and access to more destinations
- Promotes choice in personal mobility & optimizes the transportation system through Intelligent Transportation Systems
- Advances connected vehicles & automation applications
- Utilizes emerging technologies & data exchange to enable personal mobility
- Encourages multimodal connectivity & system interoperability



## Trends: What's Driving MOD?



#### **Societal Trends**

- Over the next 30 years, the U.S. population is expected to grow by 70 million
- By 2045 the number of Americans over the age of 65 will increase by 77%





### **Technological Trends**

- The transportation sector is increasingly relying on data to drive decisions and to enable innovative travel options
- 72% of Americans own a smartphone, allowing them to access to traffic and transit information to information travel choices
- Automated transportation offers transformation possibilities for safety, mobility, and accessibility

### **Mobility and Environmental Trends**

- On average, Americans spend over 40 hours stuck in traffic each year, costing \$121 billion
- There is growing popularity of shared mobility and shared modes, such as bikesharing, carsharing, and ridesourcing





## MOD Sandbox Program Overview

### **Demonstration Program to Explore MOD Models**

- **Explores** innovative approaches to integrate MOD solutions with public transportation
- **Empowers** project teams to implement innovate business models to deliver high-quality, seamless and equitable mobility options
- Informs the MOD program on how to approach MOD and structure future MOD policies, and support grantees





### MOD Sandbox At a Glance







# Why Automation in Transit?

- Improve safety
- Increase efficiency and productivity
- Potentially reduce costs
- Increase traveler convenience through improved service frequency and flexibility
- Expand service hours and areas
- Increase customer satisfaction
- Adapt to change -- it's inevitable





## **Broad Automation Research Goals**

- Conduct foundational research to ensure safe and effective deployment of automation in transit
- Identify and resolve barriers to deployment of transit automation
- Socialize automation for transit stakeholder community
- Leverage technologies from other sectors to move transit automation forward
- Grow industry by demonstrating market-ready technologies in real-world settings





### Automation in the Public Transportation



Pierce Transit (Washington)



EasyMile (California)



Local Motors (Maryland)



Navya (Michigan)



SB Drive (Japan)



Proterra (Nevada)



Mercedes-Benz (Amsterdam)



LTA & NTU (Singapore)





## THANK YOU!

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For more information on MOD Program and MOD Sandbox, please search internet using "Mobility on Demand", or "Mobility on Demand Sandbox"



