

# Automated Low-Speed Shuttles: State of the Practice

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U.S. DOT

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# Low-Speed Automated Shuttles:

Fully automated driving (Level 4)

Restricted Operational Design Domain (ODD)

Low speeds

Shared service and right-of-way



# State of the Practice

Low-Speed Automated Shuttles in the United States

# Low-Speed Automated Shuttles: State of the Practice Study (ITS JPO/Volpe Center)

- **Monitor** development and deployment activity
- **Convene** working group of early deployer communities and other organizations interested in small, automated shuttles.
- **Document** Emerging Findings – including best practices, barriers, and lessons learned from early deployers and technology suppliers

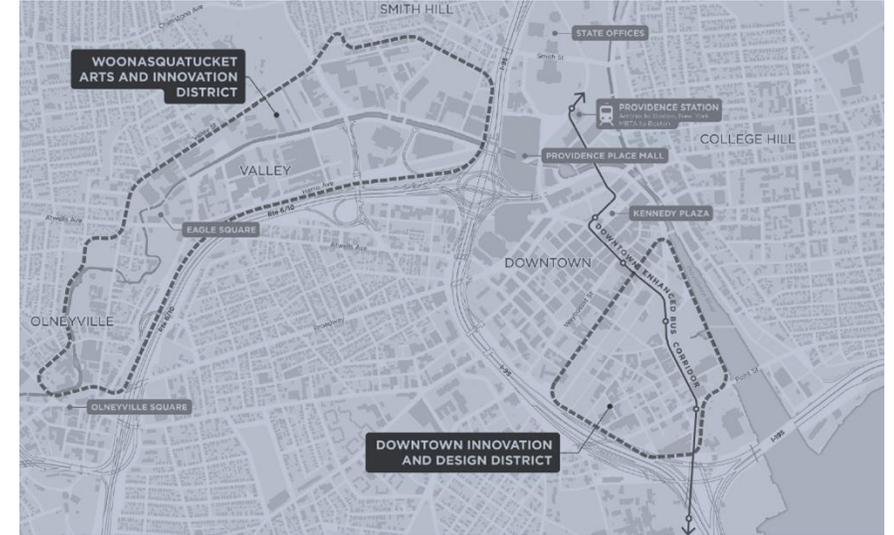
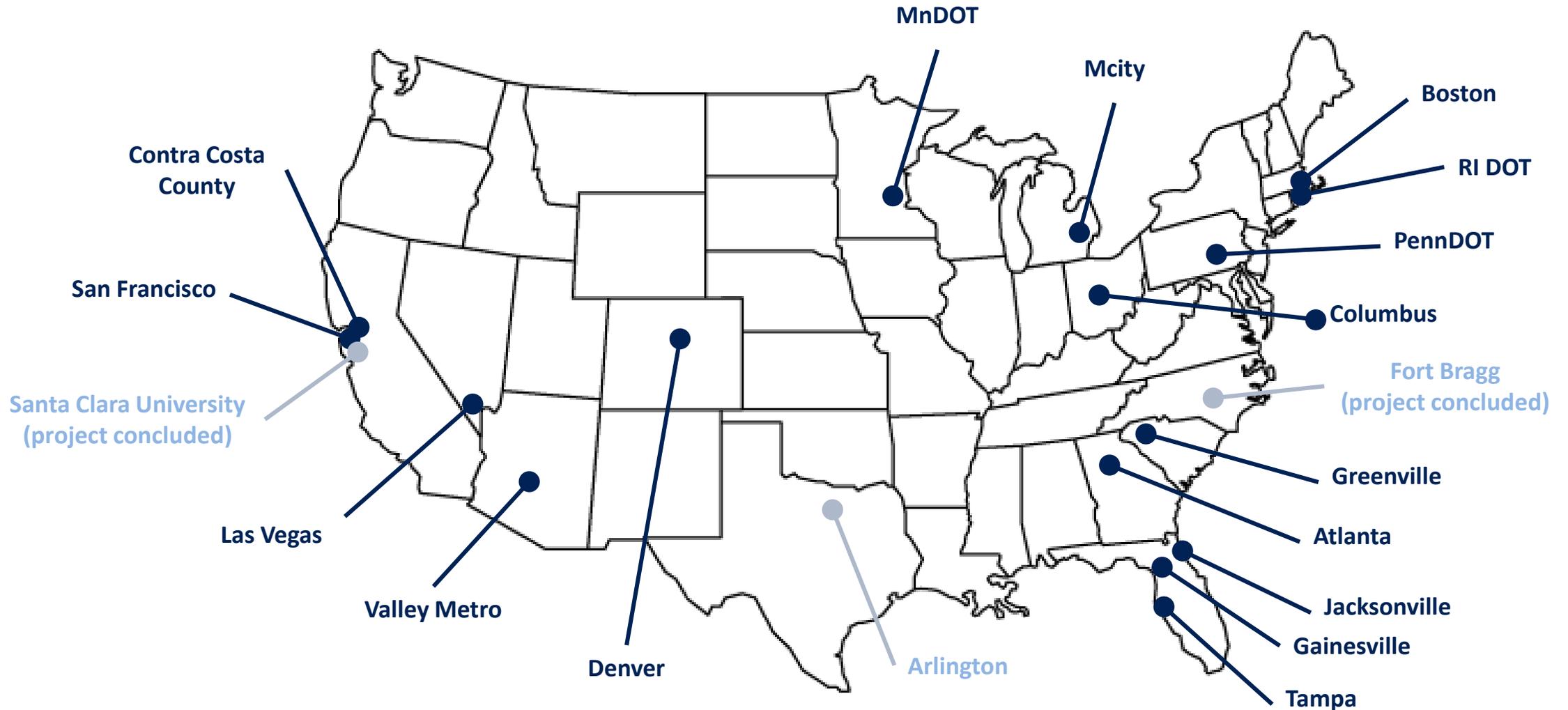


Image: RIDOT

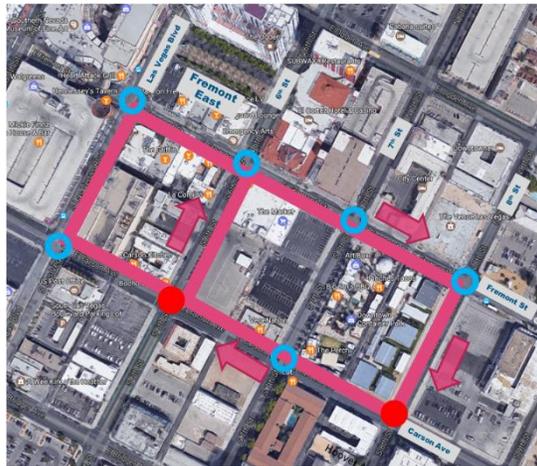
# Working Group Member Projects



# Case Studies



## Jacksonville



## Las Vegas



## Arlington



## Ann Arbor

Report Link:  
<https://mcity.umich.edu/wp-content/uploads/2018/09/mcity-driverless-shuttle-case-study.pdf>



# Overview: Service Characteristics

Use case

Integration with other transportation services

Fare payment

Service design



Image: GoMentum Station

# Common Challenges

Vehicle capabilities

Operating environment

Product availability

Financial considerations

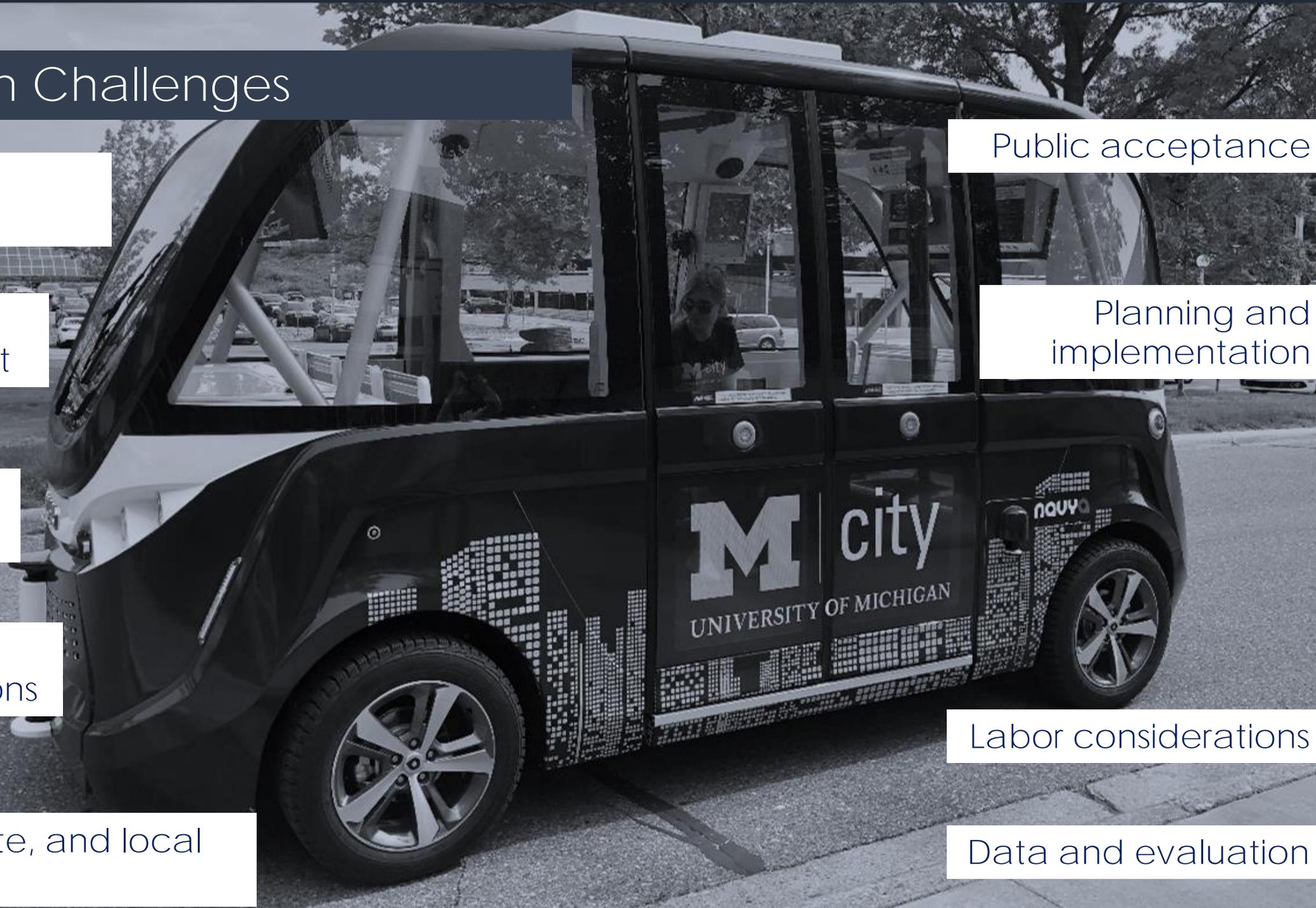
Federal, state, and local regulations

Public acceptance

Planning and implementation

Labor considerations

Data and evaluation



# Key Findings

Substantial interest

Evolving  
vehicles

Use cases

Onboard  
attendants

Evaluation



# What's Next?

- U.S. DOT Research in Progress
  - Smart Columbus May Mobility Demonstration (ITS JPO)
  - San Francisco (Treasure Island) and Greenville, S.C. (FHWA)
  - Human Factors and User Acceptance Research (FTA)
- Potential U.S. DOT Funding Opportunities
  - Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grants (FY2019 and FY2020)
  - Automated vehicle demonstration grants (Consolidated Appropriations Act, 2018)
  - Integrated demonstration grants (FTA STAR Plan)
- Other Activities
  - TCRP J-11/Task 27 Low-Speed Automated Vehicles (LSAV) in Public Transportation ([link](#))

# Keep in Touch!

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