RIDOT’s Policy and Innovation Team

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RIDOT’s Efforts to Date

• **April 2017**: RIDOT hosts International Mini-Summit on CAVs

• **June 2017**: RIDOT issues [Request for Information (RFI)](#) on CAVs and innovative transit systems

• **July 2017**: The [Rhode Island Transportation Innovation Partnership (TRIP)](#) is established

• **September 2017**: TRIP hosts CAV Expo at The New England Institute of Technology

• **October 2017**: RFI Closed & Reviewed

• **November 2017**: Joint research forum with URI on “Transportation Innovation Partnership (TRIP): Leading the Way for Research”
GOALS OF TRIP

• Safer transportation

• Sustainability, fuel reduction, reduced congestion

• Improved and equitable mobility

• Economic growth and a strong workforce

• Smart cities, data management, and privacy
TRIP Autonomous Vehicle Mobility Challenge

- A pilot program aimed to safely test multi-passenger autonomous vehicles (SAE Level 3+) on Providence’s streets
- Presenting a unique opportunity to explore the integration of new technologies into public transit
- Providing the public exposure to autonomous vehicles and the opportunity to engage in the Challenge and learn with us
TRIP MOBILITY CHALLENGE

RFP Issued: April 27, 2018

Pre-Proposal Conference
May 21, 2018 @ 1:00 PM

Submissions Due
July 13, 2018 @ 11:30 AM
TRIP AUTONOMOUS VEHICLE MOBILITY CHALLENGE

The TRIP Approach

- Create a safe and accessible environment for testing autonomous vehicles in RI
- Complement RIPTA service with electric micro transit
- Improve mobility with a focus on equity
- Create a framework for economic growth and a stronger workforce
- Integrate Smart City applications and explore data management and privacy concerns
- Leverage academic partners to research opportunities and challenges
- Engage and educate the public
Why the Woonasquatucket Corridor?

- One of Providence’s new Urban Innovation Districts
- Increasing residential, commercial, and non-profit investment
- Diverse neighborhoods with a variety of needs
- Transit Desert- There is no existing RIPTA service
Research Team

Representatives from local and regional higher education institutions, technical colleges, and government research entities

- **Workforce**: opportunities for career pathways and impacts, operator roles, responsibilities, and experiences, convening of public to engage in workforce dialogue

- **Social and behavioral impacts**: public acceptance and understanding of the technology, user behavior, transit choices and trends, etc.

- **Environment and Land use**: fuel related emission impacts, charging needs, charging infrastructure, integration on existing roads and with existing transportation infrastructure, land use opportunities/impacts

- **Design and the human-machine interface**: vehicle design and human interaction, interior design and information sharing, mobile applications
Phase I: Within 90 days of contract award

- Vehicle Identification and Approval (including NHTSA certification)
- Phase I Testing and Approval
  - Relatively controlled environment testing on roads within Quonset Business Park
  - Both daytime and nighttime testing and adverse weather condition testing
- Stakeholder Engagement
- Route Finalization
- Marketing Plan, Education Plan, Emergency Plan and Training, etc.
Phase II: Testing on Proposed Service Route

• Testing and configuration of the Vehicle(s) on the approved service route
  • Minimum 4 weeks
  • No occupants on vehicle(s) other than Vendor, RIDOT, and TRIP partners
  • Both daytime and nighttime testing and adverse weather condition testing
  • Must be repeated at Quonset for adverse weather conditions (i.e. snow, rain, etc)

• Safety report after testing

• Public showcase and stakeholder engagement of vehicle(s)
Phase III: Live Operations

First two weeks of Live Operations to be conducted under controlled conditions during which the Vendor with RIDOT approval may make needed adjustments based on the observations

- Weekly performance reports
- Provide adequate traveler information available online, in-app, and at various stops along the route

Phase IV: Scalability

Assessment Report on the overall viability of the Service, including recommended adjustments for Year 2 of Operations and the scalability of the Service to other districts within the City of Providence and/or Rhode Island
Questions?

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