



Julia Gold, Chief of Sustainability and Innovation
Rhode Island Department of Transportation



RIDOT's Policy and Innovation Team



Pamela Cotter
Policy Director
Rhode Island Department of
Transportation (RIDOT)



Julia Gold – Project Manager
Chief of Sustainability and Innovation
Rhode Island Department of
Transportation (RIDOT)



Russell Holt, P.E.
Senior Civil Engineer
Rhode Island Department of
Transportation (RIDOT)



Shoshana Lew
Chief Operating Officer
Rhode Island Department of
Transportation (RIDOT)



Ken White
Programming Services Officer
Rhode Island Department of
Transportation (RIDOT)



Christos Xenophontos
Assistant Director
Rhode Island Department of
Transportation (RIDOT)



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



PARTNERS



PROVIDENCE

THE CREATIVE CAPITAL



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

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

TRIP AUTONOMOUS VEHICLE MOBILITY CHALLENGE

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?

Julia Gold

Chief of Sustainability and Innovation

Rhode Island Department of Transportation

Julia.Gold@dot.ri.gov

401-222-6940 x4665

www.dot.ri.gov/TRIP

