

Connected, Rural, Equitable, and Autonomous Transportation for Everyone (CREATE)

Project submitted to the FY2023 USDOT

Advanced Transportation Technologies and Innovation (ATTAIN) Grant Program

PARTICIPATING PARTNERS:

- **May Mobility** – Automated Vehicle (AV) provider
- **Via** – Software provider for this project and the current Wilson RIDE microtransit service
- **North Carolina Agricultural and Technical State University (NC A&T) North Carolina Transportation Center of Excellence in Connected and Autonomous Vehicle Technology (NC-CAV)** – Data collection and analysis (including conducting rider surveys)
- **Community Transportation Association of America (CTAA)** – Transportation advocacy organization and project public engagement advisor

PROJECT COMPONENTS:

- Introduces five (5) hybrid electric AVs in an on-demand microtransit service.
- Expands transit service to employment centers, including the Bridgestone Americas Plant, FedEx Distribution Center, and Triaga, Inc.
- Increases service hours to provide equitable access to employment for shift workers.
- Pilots prescheduling option for rides to employment, medical appointments, and other pre-planned trips.

PURPOSE:

- Tests how AVs can provide easier, more reliable, efficient, and equitable access to transit.
- Supports job training and employment by connecting riders who require special accommodations to Diversified Opportunities, Inc., which provides vocational training and day programs to community members with disabilities.
- Gathers data to understand rider preferences and behaviors related to AVs as part of an on-demand service.
- Provides a reproducible model and guidance for communities in North Carolina to implement similar projects.

KEY BENEFITS:

SAFETY

- Provides transit access for zero-vehicle households in areas that do not have sidewalk.
- Addresses any rider safety concerns by including an in-vehicle trained autonomous vehicle operator (AVO) who will operate the vehicle when necessary and provide customer service.

EQUITY

- Improves access to transit for zero-vehicle households, low-income populations, and people with disabilities through expanded access and a pre-scheduling option.
- Integrates ADA-compliant vehicles into the fleet.

CLIMATE AND SUSTAINABILITY

- Decreases greenhouse gas emissions with hybrid electric vehicles.
- Pools and/or dynamically routes trips to reduce vehicle miles traveled (VMT).
- Reduces idling at employment centers during shift changes.

WORKFORCE DEVELOPMENT

- Promotes economic growth.
- Lowers transportation costs for riders.
- Improves transportation reliability and employee retention.
- Creates 25 jobs.

DEMOGRAPHICS:

- Serves 25,400 people in the expanded service area, including 9,000 people living below the federal poverty line.
- 64% of residents in the service area identify as BIPOC.
- 9 historically disadvantaged communities served.

