



## Autonomous Mobility Service Project

Florida Automated Vehicle Summit  
November 27-28, 2018

# Project Overview



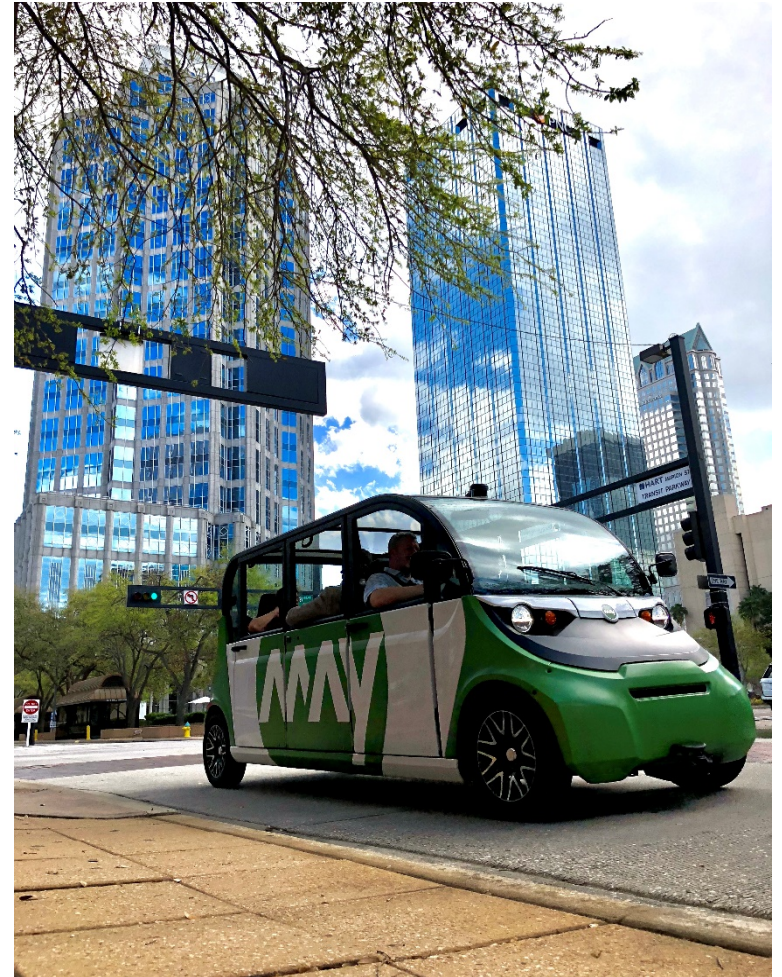
- Connects MTC with downtown
- 0.6 miles along Marion/0.2 loop
- 8 signalized intersections with DSR
- 3 intersections controlled with stop signs
- CSX Railroad crossing at Polk Street
- Vehicles traveling near 15 mph
- 10 minute headways
- Operating hours: 6 am – 7 pm
- 1 year pilot; 24 monthly extensions

# First Award

- Awarded in October 2017
- Work Plan never materialized
- Vehicle was not ready for testing
- Deadlines missed
- HART cancelled contract January 2018

# AV Demonstration

- In coordination with HART and the City of Tampa. On February 27, 2018, May Mobility, Inc. from Ann Arbor Michigan, demonstrated their autonomous vehicle, on the Marion Street Transitway in the heart of downtown Tampa.
- May Mobility drove autonomously through signalized and non-signalized intersections with live traffic including circling HART's Marion Transit Center.



# Industry Best Practices Utilized

- List of Vendor Questions
- Developed concept of operations/ shuttle requirements
- Include NHTSA requirement as evaluation criteria
- Clearly defined success measures
- Defined scope of work/deliverables for proposers
- Develop payment schedule to reflect deliverables/success measures

# Project Purpose

| Purpose                                      | Measures of Success  |
|--|--|
| Move People Safely, Efficiently, Sustainably | Number of incidents (safe)<br>Ridership (efficient)<br>Emission (sustainable)<br>AMS Energy/Carbon Intensity |
| Increase Multimodal Options/Connectivity     | Operational hours<br>Quality of service (downtime of ATS)<br>Number of Concierge Engagements                 |
| Showcase the City (Encourage innovation)     | Complete the pilot<br>Transition to operations (from Pilot)  |
| Attract Private Industry                     | Contribution from private sector   |

# Project Approach

- Phase I – Prepare for pilot
- Phase II – Conduct testing
- Phase III – Conduct the pilot
- Phase IV – (Optional) Continue the pilot
- Phase V – (Optional) Expand the pilot

# First Transit/Navya

- Highest Technical Score and Lowest Cost
- Top Ranked Vendor by 4 of 5 Evaluators
- Experienced Team
  - Implemented AV in Contra Costa County, CA & Arlington, TX
- Sound technical approach/work plan
  - Quality Control,
  - Risk Management,
  - Primary Requirements,
  - Local Facility Identified



First  Transit



# First Transit/Navya

- Vision 2.0 Safety Compliant
- Meets most NHSTA requirements
- ADA Compliant
- Shuttles satisfy most of the Requirements



First  Transit



- HART/HNTB Navya Site Visit
  - Vehicle delivery capability
  - Vehicle operations
    - Pedestrian detection
    - Cross vehicle detection
    - Acceleration/braking
    - ADA



First  Transit

  
www.goHART.org

## Timeline

- March 2018- HART selects HNTB for RFI and RFP support to select an AV vendor
- April 2018- HNTB reaches out to vendor community refines specifications, HART releases RFP for autonomous service
- July 2018- HART and Stakeholders select vendor
- November 2018- HART board awards contract to First Transit
- January 2018 – Obtain NHTSA exemption and begin testing