

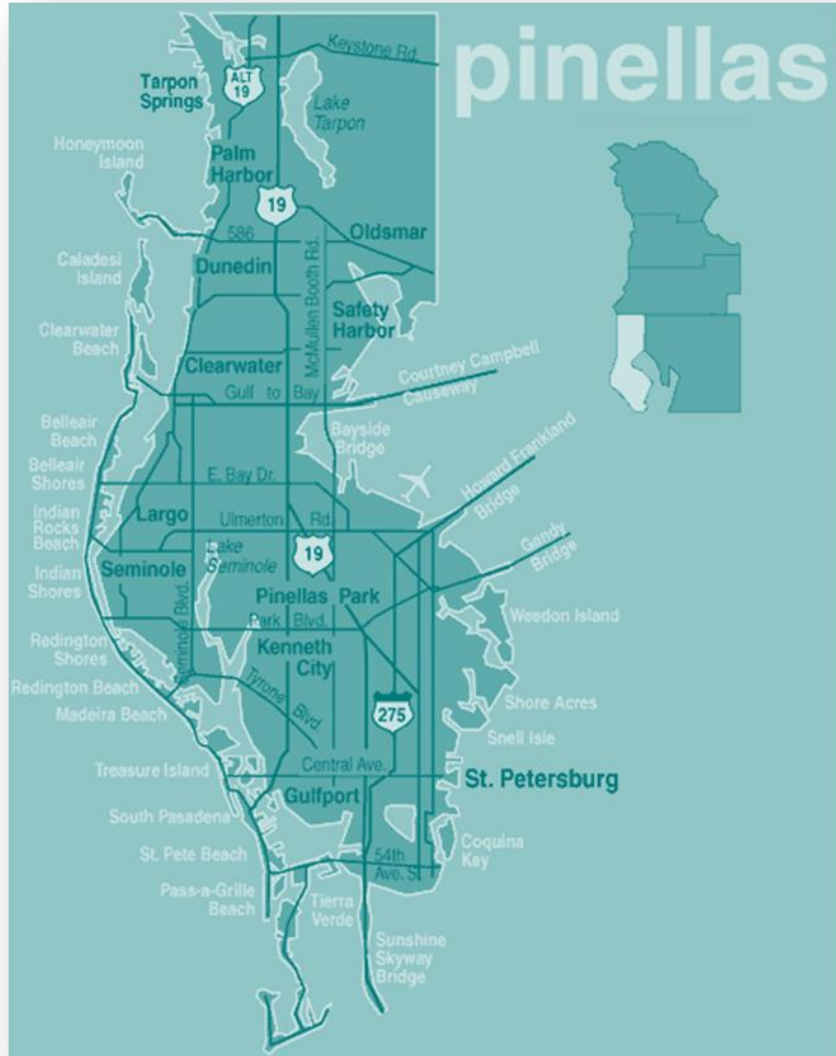


Pinellas County's Newest Resident: AVA

8/17/2022

Pinellas Suncoast Transit Authority

PSTA – Pinellas County



PSTA Transportation Innovation



- PSTA is incorporating transportation technologies that are:

- Autonomous ✓
- Conected ✓
- Electric ✓
- Shared ✓



- PSTA is a nationally recognized leader in innovation



Operated Shuttles



Beep has operated two NAVYA & Olli shuttles for PSTA.

Drive System

- Motor: Electric
- Operating speed: up to 15 mph

Energy

- Operating time: 7-9 hours
- Charge duration up to 90%: 3-4 hours

Sensors

- Light Detection & Ranging (LiDAR)
- Cameras
- Dedicated GPS Base
- Safety sensors that detect obstacles in roadway



Meet AVA



- AVA (Autonomous Vehicle Advantage) is the latest temporary resident of Pinellas County
- **St. Petersburg:**
 - Operated Nov '20 – Mar '21
 - AVA provided almost 5,000 rides
 - An average of 63 people per day rode AVA
- **Dunedin:**
 - Operated Spring '21 & '22
 - AVA provided over 3,000 rides
 - An average of 50 people per day rode AVA
- **Clearwater:**
 - Operated Feb – Mar '22
 - AVA provided over 2,700 rides
 - An average of 89 people per day rode AVA



St. Petersburg AVA Route



- 2 shuttles were deployed with 1 attendant for customer safety and feedback per shuttle
- Shuttle operated on a continuous 1-mile loop along Bayshore Drive
- Fare-free service
- Operated Wed – Sun from 10am to 10pm
- Project was funded through a FDOT Commuter Assistance Program (CAP) grant with matching funds from PSTA



Dunedin AVA Routes

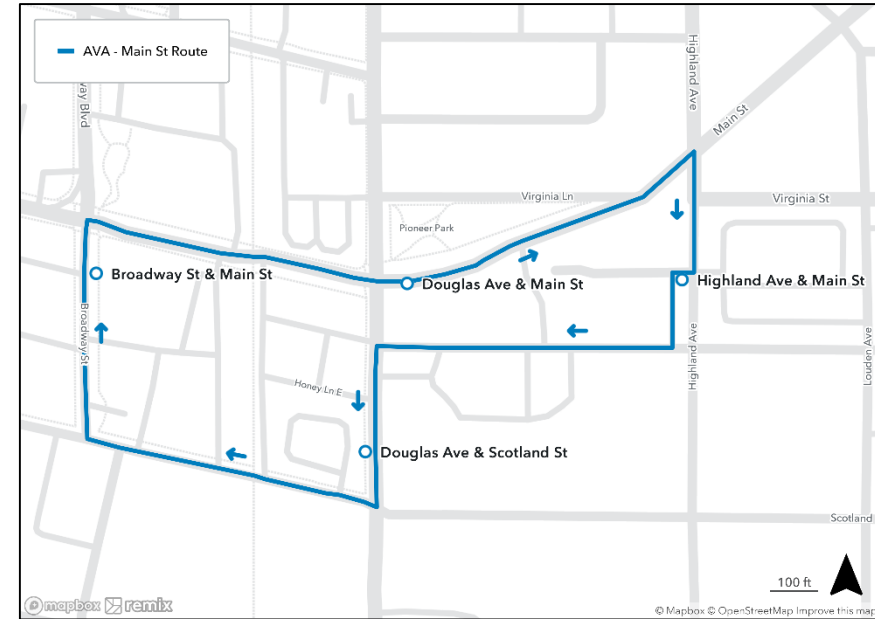


- 2 shuttles were deployed with 1 attendant for customer safety and feedback per shuttle
- Shuttle operated on a continuous loop along Douglas Ave & Main St
- Fare-free service
- Operated Wed – Sun from 10am to 10pm
- Returned to Douglas Ave late April 2022

Douglas Ave



Main St



Clearwater AVA Route



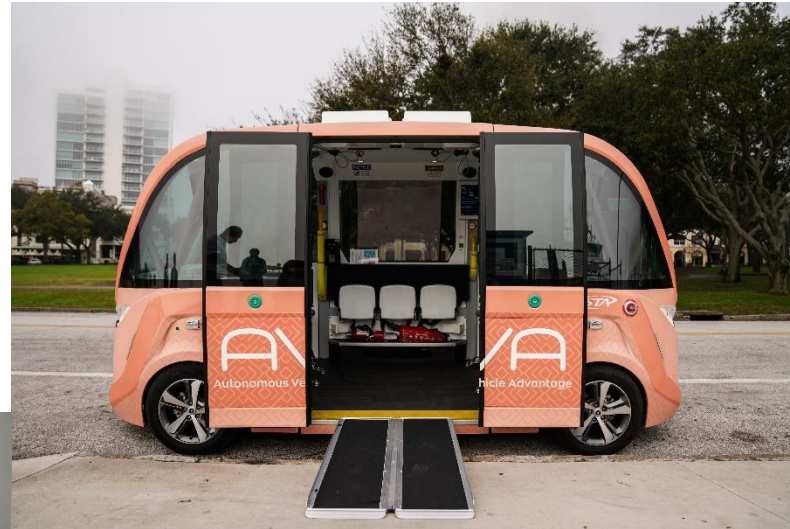
- 2 shuttles were deployed with 1 attendant for customer safety and feedback per shuttle
- Shuttle operated on a continuous 1.5 mile loop along Gulfview Blvd
- Fare-free service
- Operated Tues – Sun from 10am to 10pm



AVA ADA Day



- PSTA hosted an ADA Day to demonstrate how the shuttle accommodates assistive mobility devices



AVA First Responder Day



- PSTA hosts a First Responder Session before each deployment so that police/fire/paramedics can learn about the AV shuttles



AVA Demonstration Takeaways



Expect the unexpected



Plan for regulation



Sharing is caring

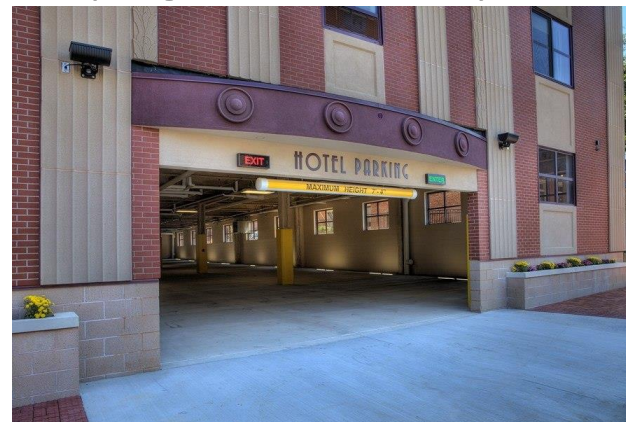


Slow your roll



Pinellas Suncoast Transit Authority

Sleeping's hard when you're tall



Scoters!





Strategic Partnerships

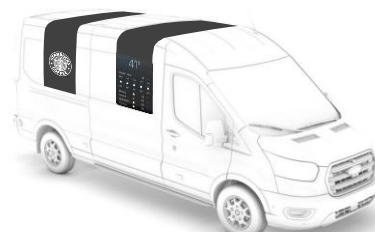
Vehicle Roadmap Strategy



NAVYA



local motors



LIGHTNING e MOTORS

FMVSS Compliant



mobileye An Intel Company BENTELER makes it happen

2020

- Experimental platforms
- Autonomous: 12mph
- Regulated: 25mph roads
- 8 - 10 passengers
- ADA Compliant & Accessible

2021

2022

- Automotive w/ ADS
- Autonomous: 25MPH
- Driven: 55MPH
- Seating: 8 -10 passengers
- FTA Buy America Compliant

2023

- Automotive-grade
- Autonomous: 30+ mph
- ADA Compliant & Accessible
- Seating: 10 passengers
- FTA Buy America Compliant

Future



- PSTA is reviewing future AVA deployment options
- Data collected through demonstration program will inform future deployments of autonomous vehicles
- Potential Future Public Transit AV Deployments
 - Downtown/neighborhood circulation
 - Bus yard operations
 - Bus on shoulders
 - Bus Rapid Transit





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