

Who is AVA?

AVA is a temporary member of Pinellas Suncoast Transit Authority's fleet. AVA is introducing the cutting-edge technology of Autonomous Vehicles to Pinellas County, starting with the Downtown Waterfront of St. Petersburg. She is the first autonomous vehicle in the Tampa Bay Area to share the road with personal vehicles.

Why did PSTA launch the AVA Pilot?

PSTA is always looking for innovative ways to help safely connect people to places. As autonomous vehicle technology is becoming more advanced, PSTA is exploring its potential use in Pinellas County. During her three-month pilot, AVA will be looking to gain feedback on how the community feels about the possibility of using Autonomous Vehicles as a transit option in the future.

What does AVA stand for?

AVA stands for Autonomous Vehicle Advantage.

What makes AVA different than other autonomous vehicle programs?

AVA is one of the first autonomous vehicle programs in the state to operate in mixed use traffic, on an open road next to other vehicles.

What are the advantages of autonomous vehicles such as AVA?

Safety – With the use of LiDAR sensors, AVA has more eyes on the road than a human driver possibly could. This results in safe transportation for riders, and other vehicles on the road.

Environmental – AVA is 100% electric. Using electricity generated from a power plant burns less fossil fuel and is more efficient than generating power/fuel for personal use (i.e., the internal combustion engine on a vehicle). AVA can drive for 9 hours on just a few dollars of electricity. In addition, fewer moving parts means less environmental impact due to reduced maintenance and AVA has no consumable fluids onboard, like oil or engine coolant, that can harm the environment.

Connectivity – In the future, autonomous vehicles such as AVA could be used as a permanent circulator service or a first mile / last mile solution to areas not served by PSTA's network.

Why did PSTA choose to partner with Beep?

PSTA decided to partner with Beep due to their experience operating autonomous shuttle technology throughout Florida. Beep is also the exclusive dealer and operator of AVA's manufacturer, NAVYA, in Florida.

How did PSTA identify the area for testing?

PSTA together with the City of St. Petersburg decided that Bayshore Drive would be the best route for the AVA pilot due to its connectivity to transit services such as the Downtown Looper, PSTA Service, and the Cross Bay Ferry.

Where does AVA take passengers?

AVA operates on Bayshore Drive between 5th Avenue N (The Vinoy Hotel) and Dali Blvd (The Dali Museum).

How much does it cost to ride AVA?

It is free to ride AVA. Passengers are limited to one consecutive round trip.

When does the AVA operate?

AVA operates between the hours of 10:00am -10:00pm Wednesday through Sunday. AVA offers rides free to the public and air-conditioned. Passengers are limited to one round trip. AVA will be operational from November 25th, 2020 – February 15th, 2021.

Does AVA connect to any other bus routes or services?

All of AVA's stops are shared with the Downtown Looper. The stop at Pier South connects to the Central Avenue Trolley and the 100X. AVA's stop at Bayshore North is a few feet away from the stop for the Cross Bay Ferry, which connects the Downtown Waterfront of St. Petersburg to Downtown Tampa.

How many passengers can AVA carry?

Typically, AVA can transport up to 15 passengers standing and seated. To keep AVA's passengers and copilots safe from COVID-19, capacity is currently limited to 6 passengers in the same party and 4 passengers in different parties. Passengers will be asked to sit in a pattern that allows for social distancing and must wear a mask when riding.

What precautions are being taken for COVID-19?

Similar to PSTA's policy, passengers and attendants onboard AVA are always required to wear a mask. Beep has implemented several processes and procedures in light of COVID-19. AVA's copilots undergo a temperature check before the start of every shift and are required to wear masks when on board. Disinfecting wipes and hand sanitizer stations are available on AVA for copilots and passengers to use. We ask passengers to use the hand sanitizer before boarding AVA and buckle their seatbelts. We have enhanced our cleaning procedures while AVA is in service and at the end of the day. We have also reduced the seating capacity on our shuttles. Passengers will notice a color-coding system onboard to provide visual cues where related passengers, unrelated passengers, and wheelchair companions should sit.

What is AVA's operating speed?

AVA can travel up to 15 mph along the corridor and have varying speeds based on where she is along the route.

How does AVA work?

AVA is a 100% electric, driverless shuttle. She has no steering wheel or pedals and uses a pre-programmed, fixed-route in combination with localization techniques, involving state-of-the-art sensor technology. Each vehicle will be staffed with a copilot to serve as an ambassador for the riders to learn more about the technology and oversee a high-quality passenger experience.

When is there a copilot on board?

AVA's copilot will always be onboard while she is operational, ensuring a pleasant and safe experience for our passengers. Our team of copilots are highly trained to provide prompt and efficient transportation for all our guests. They are also trained on AVA's safety features. AVA's copilot can take over manually at any time by utilizing a controller on board. They are also very friendly and would love to share more with you about the area, the attractions, and the service. Copilots are meant to serve as ambassadors for the autonomous shuttle and educate riders on how the shuttle operates.

How does AVA safely share the road with PSTA buses, other traffic, and pedestrians along the Bayshore Drive corridor?

AVA will share the road with buses during operational hours. Similar to transit buses and traditional vehicles, AVA will observe all traffic signals. The copilot onboard will also do a visual check of the intersection before entering to ensure the vehicle's safe operation. There are 8 optical sensors on the outside of AVA, providing a 360-degree view of the environment. Each sensor allows AVA to respond to traffic or pedestrians that may come in the vehicle's path.

How does AVA safely navigate traffic signals and stop signs?

When AVA approaches a traffic signal or sign, her copilot will take control of the operating systems. The copilot will complete a visual check of the intersection before entering. Once the intersection has been deemed clear, the copilot will let AVA know that it is safe to proceed.

What ADA features does AVA have?

AVA has several features onboard that allow for the ADA community to ride and experience the technology. When pulling up to a stop station, AVA kneels toward the curb. The copilot will then deploy a ramp allowing for passengers to board. Inside AVA, there is a Q'Straint system to secure both the passenger and mobility device when the vehicle is in motion. When disembarking and boarding, the copilot onboard will announce the upcoming stop and inform passengers who are boarding what stop is next on the route. AVA is also equipped with monitors that display a route map and upcoming stop names.

Can I bring my pet aboard AVA?

Service and companion animals are allowed to ride AVA.

Can my child ride AVA alone?

Under our minor policy, children under 16 years of age must be accompanied by an adult. The adult must remain with the child for the trip's duration, and children must stay seated and buckled up for the entire ride. Children too small to safely wear a seatbelt are asked to be seated in a parent's lap and sit towards the front of AVA if possible.

Do I need to bring my own car seat or booster for my children?

AVA does not have car seats or accessible tether anchors so bringing a car seat or booster is not an option for transporting small children. Children must always be seated and wear seatbelts. Children too small to safely wear a seatbelt are asked to be seated in a parent's lap and sit towards the front of AVA if possible.

What can I bring onboard AVA?

To provide a comfortable and safe riding experience for everyone on AVA, we ask all passengers to bring and wear a mask while riding the shuttle. At this time, we cannot accommodate items larger than a backpack, foldable umbrella, stroller, or foldable walker. AVA is equipped to transport passengers with ADA needs with a Q'Straint system onboard.

What safety features does AVA have for her riders?

AVA is equipped with seatbelts, an onboard emergency kit, and an emergency stop button. AVA is always communicating with the Beep Command Center through interior cameras and GPS locators that monitor her movement and location. A copilot will always be on board to ensure the safety and comfort of AVA's passengers.

Can I flag AVA?

At this time, you cannot flag AVA. She runs on a fixed route and only makes designated stops. AVA is unable to make any additional stop requests.

Can I request a stop at any point along the route?

No. AVA will not pull over anywhere other than at designated shuttle stops.

What training has taken place to ensure the safety of passengers riding AVA?

The copilots have been fully trained on the safety features of the vehicle. The service personnel in the Command Center are also trained on how to respond to an emergency should the copilot need assistance. Beep has conducted safety training with First Responders, such as the St. Petersburg Fire Department and St. Petersburg Police department. First Responders are familiar with AVA and trained on appropriate actions to take if the need arises.

Is AVA in other cities?

AVA is unique to St. Petersburg's Downtown Waterfront. However, AVA has friends all over the United States in cities such as Tampa, FL; Lake Nona, FL; Jacksonville, FL; and Peoria, AZ.

How safe is AVA?

Safety track record stats about Beep and Navya.

What is AVA Made out of?

Under her vibrant exterior, AVA is made of a steel frame and fiberglass body.

What are AVA's capabilities?

AVA has a wide skill set of tasks that she can complete all on her own, including braking, U-turns, and parallel parking.

With 8 LiDAR Sensors and two cameras, AVA can see more of the road than any human driver.

AVA is a careful and defensive driver. If a car or pedestrian become too close for comfort, AVA will slow down and utilize her decision-making skills. Almost instantaneously, AVA will decide if she can safely steer away or needs to come to a complete stop.

What are autonomous vehicles?

An autonomous vehicle (AV), also known as a driverless or self-driving vehicle, is a vehicle capable of sensing its environment and moving with little or no human input. The shuttles are manufactured by NAVYA, a leading company in the autonomous vehicle industry based in France.

Who is NAVYA?

Founded in 2014, NAVYA is a leading company in the autonomous vehicle and shared mobility solutions markets. NAVYA develops and manufactures autonomous vehicles for public roads and private sites and has safely transported more than 350,000 passengers in over 20 countries worldwide.

Who is BEEP?

Beep is an autonomous mobility solutions provider of driverless shuttles and fully managed services in private and public communities and headquartered in Lake Nona, Florida. Beep launched its first autonomous shuttle in Florida in September 2019 in Lake Nona with a 1-mile route connecting the residential and retail areas. It is currently operating 3 routes in Lake Nona and developing an AV mobility network over the next couple of years with the help of a BUILD grant awarded in November 2019 from the USDOT. Beep is also the only service provider involved in the initial launch of the NHTSA AV-TEST program.

What type of engine does AVA have, and how is it charged?

AVA is 100% electric and has a two-wheel drive. She can be recharged by plugging into a 220V socket.

Does AVA offer air-conditioning and heating?

AVA is equipped with a heating and air conditioning system.

How is AVA monitored?

AVA and her copilot are in constant communication with the Beep Command Center located in Orlando, Florida. The personnel in the Beep Command Center continuously monitor AVA's movement and operations. The copilot can communicate with the command center at any time should the need arise. AVA is equipped with cameras so that the command center can see outside and inside at any time.