

Frequently Asked Questions

How was HART SMART AV born?

On May 4th, the Hillsborough Area Regional Transit Authority (HART) Board of Directors approved the pilot program for at least one year of operation with an option to continue the program for a second year. With the assistance of the Florida Department of Transportation, HART was awarded funding to procure and operate the pilot AV shuttle program. The project is fully funded by the Florida Department of Transportation (FDOT) with no required match on behalf of HART.

Where does the HART SMART AV/BEEP pilot take passengers?

The HART SMART AV route follows operates on a more than 1-mile loop between E. Laurel Street and E. Whiting Street along the Marion Street corridor. The one-year pilot consists of 1 NAVYA autonomous shuttle. HART SMART AV will serve four stops along the route including Transit Hub Bay F, Fort Brooke (Southbound), Washington (Northbound), and Kennedy (Northbound). The corridor is limited to bus traffic only on 75% of the route with restricted access between 6 AM – 7PM.

When does the HART SMART AV/BEEP pilot operate?

HART SMART AV will operate between the hours of 6 AM-10 AM and 3PM-PM on weekdays. Shuttle service is free to the public and air conditioned.

How many passengers can HART SMART AV carry?

The shuttle can transport 15 people both standing and seated. At this time, seating onboard will be *limited* to accommodate reduced capacity on the shuttle to comply with best practices for COVID-19. Capacity is limited up to 6 passengers based on staggered seating configurations. Passengers will be required to wear a seatbelt at all times when riding the shuttle.

What precautions are being taken for COVID-19?

Similar to HART's policy, passengers and attendants are always required to wear a mask. Beep has implemented several processes and procedures in light of COVID-19. Shuttle attendants undergo a temperature check prior to the start of every shift and are required to wear masks when onboard. Disinfecting wipes and hand sanitizer stations are available on shuttles for attendants and passengers to use. We ask passengers utilize the hand sanitizer prior to boarding the shuttle and buckling their seatbelt. We have also enhanced our cleaning procedures while the shuttle 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 the operating speed?

The shuttle can travel up to 15mph along the corridor and have varying speeds based on where the shuttle is operating along the transitway.

How does HART SMART AV work?

HART SMART AV is a fully electric, driverless shuttle. The shuttle has no steering wheel or pedals and will use a pre-programmed, fixed-route with a combination of localization techniques, involving state-of-the-art sensor technology. Each vehicle will be staffed with a shuttle attendant to serve as an ambassador for the riders to learn more about the technology and oversee the high-quality passenger experience.

How is HART AV environmentally friendly?

The vehicle is 100% electric and takes less than \$30 a month to charge.

When is there a shuttle attendant onboard?

An Autonomous Shuttle Attendant will always be the shuttle while it is operational to ensure a pleasant and safe experience for our passengers. Our attendants are highly trained to provide prompt, and efficient transportation for all our guests. They are also trained on the safety features of the shuttle and have the ability to take over manually at any time by utilizing a controller onboard. They are also very friendly and would love to share more with you about the area, the attractions and the service. Attendants are also meant to serve as ambassadors for the autonomous shuttle and educate riders on how the shuttle operates.

How does HART SMART AV safely share the road with HART buses, other traffic and pedestrians along the Marion Street corridor?

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

What ADA features does the shuttle have?

The shuttle has a number of features onboard that allow for the ADA community to ride and experience the technology. When pulling up to a stop station, the vehicle kneels toward the curb to provide better access to the shuttle once the ramp is deployed for passengers to board. Inside the cabin, 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 vehicle, the attendant onboard will also announce the upcoming stop as well as inform passengers who are boarding what stop is next on the route. The vehicle is also equipped with monitors that display route connections and a map of the route.

Can I bring my pet on the shuttle?

Service and companion animals are allowed to ride the shuttle.

Can my child ride the shuttle 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 duration of the trip and children must remain seated and buckled up for the entire ride.

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

The shuttle 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 be seated and wear seatbelts at all times.

What can I bring onboard?

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

What safety features does the shuttle have for its riders?

The shuttle has seatbelts and an emergency kit onboard. The vehicle is also equipped with an emergency stop button. It also has cameras inside connected to the Beep Command Center that is always monitoring the shuttle's movement and location. An attendant will always also be aboard to ensure the safety and comfort of our passengers.

Can I hail the shuttle?

At this time, you cannot hail the shuttle. It runs on a fixed route and only makes designated stops.

Where will the schedule of the shuttle be posted?

The schedule will be posted at gohart.org/avpilot

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

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

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

The shuttle attendants 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 if the shuttle attendant requires assistance. In addition, Beep has conducted safety training with First Responders such as the Tampa Fire Department and Tampa Police department to familiarize them with the shuttle and train them on appropriate actions to take if the need arises

What are autonomous vehicles?

An autonomous vehicle (AV), also known as a driverless or self-driving vehicle, is an electric 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 both private and public communities and is 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 community and retail area. It is currently operating three 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 it have and how is it charged?

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

Are the shuttles air-conditioned and heated?

The shuttle is equipped with a heating and air conditioning system.

How is the shuttle monitored?

The shuttle and shuttle attendant are in constant communication with the Beep Command Center located in Orlando, Florida, where the company is headquartered. The personnel in the Beep Command Center continuously monitor the movement and operation of the shuttle. The attendant can communicate with the command center at any time should the need arise. The shuttle is equipped with cameras so that the command center can also see outside and inside the shuttle at any time.