

Jacksonville BPAC Meeting Notes
Hybrid Meeting
February 1, 2024 @ 5:30 PM
Ed Ball Building – 3rd Floor Conference Room
214 N Hogan Street – Jacksonville FL

Attendees:

In person: Peter Borenstein (BPAC Chair) Larry Roberts (JTC), Barry Cotter, Stephanie McCaffrey (BPAC Secretary), Logan Cross (Sierra Club, San Marco Preservation Society), Marcus Dixon (JTA), Angie Williams (JTA), Len Burroughs (NFBC), Bre’Onna Brewer (JTA), Matt Fall (COJ Bicycle Pedestrian Coordinator), Monty Selim (Groundwork Jacksonville)

Virtual: Lauren Rushing (BPAC Vice Chair), Marlo Zarka (Blue Zones Project)

Peter Borenstein chaired the meeting.

I. Introduction & Adoption of Minutes

Peter Borenstein moved for the adoption of the meeting minutes for the BPAC meeting that was held on January 11, 2024. Larry Roberts seconded the motion. The vote to approve the meeting notes was unanimous.

Peter Borenstein announced that Anne Coglianese, COJ’s Chief Resilience Officer was due to present on Resilient Jacksonville Strategy but is unable to attend due to illness. Her presentation will be moved to the March 2024 meeting.

II. Presentation – Bay Street Innovation Corridor, Angie Williams, Jacksonville Transportation Authority (JTA), Director of U2C Programs

Angie Williams (JTA) joined BPAC to present on JTA’s Bay Street Innovation Corridor (BSIC). She was joined by her colleagues Marcus Dixon, Special Projects Manager, and Bre’Onna Brewer, Autonomous Vehicle Specialist. Ms. Williams is the Project Manager for the BSIC project. The Bay Street Innovation Corridor is a project that aims to operate Autonomous Vehicles (AVs) as public transit on Bay Street in downtown Jacksonville from Jefferson Street in the LaVilla neighborhood to the Sports and Entertainment District.

Ms. Williams described the project as an effort to dream big, be bold and be innovative. Jacksonville would be the first city in the United States to use Autonomous Vehicles as public transit.

The project developed out of an investigation into the condition of the skyway structure and vehicles. The skyway vehicles are reaching the end of their useful life. The ‘Ultimate Urban Circulator’ (U2C) program evolved as a way to use the existing bridge superstructure and to continue to use driverless vehicles on the structure. The U2C project will go beyond downtown Jacksonville with a series of planned neighborhood extensions.

Phase One of the project will have AVs operating as shuttles from Jefferson Street to the Sports and Entertainment District and run entirely at grade. Phase Two of the project is converting the Skyway to support AVs.

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Ms. Williams discussed the importance of a supportive project ecosystem. This includes partnerships between JTA and the AV industry, the community, schools, and employees. She highlighted the importance of STEAM and STEM partnerships with colleges and universities. There are AVs operating on an FSCJ campus and at JTech.

Government policy and requirements are also part of the project ecosystem. Currently the 'Buy America' requirements limit the types of vehicles JTA can use. There are currently no American AV manufacturers. Matt Fall asked if there is a workaround for this issue. Ms. Williams stated JTA has been really focused on addressing this issue, looking at ways to attract AV manufacturers to Jacksonville. However, at this stage, the vehicles used for Bay Street Innovation Corridor will be Ford E-Transit vans with a robotic kit and a steering wheel. JTA would like to use fully autonomous vehicles.

Logan Cross asked about the project name - is the project an 'innovative' approach or is it aimed to promote 'innovation' in the corridor more broadly? Ms. Williams stated, 'yes to both'. The AV center in LaVilla will have an educational component about innovation in the transportation industry. Originally the project on Bay Street would have had smart trash cans, bicycle lanes, and other features, but these were not able to be included in the final project scope due to differing priorities among project partners.

The Bay Street Innovation Corridor scope of work includes 14 autonomous vehicles operating in mixed traffic on Bay Street from Jefferson Street to the Sports and Entertainment District. It will include 12 branded stations, upgraded lighting, a new pedestrian walkway and pedestrian signal on Gator Bowl Boulevard. The scope of Phase One also includes JEA installing a new fiber backbone under Bay Street, Electric Vehicle charging infrastructure (for the JTA AVs and for the public).

There are no bicycle lanes included in the project. Ms. Williams recommended BPAC members reach out to council members, the Downtown Investment Authority and Downtown Vision if there were questions as to why a bike lane was not included. There is planned new residential and commercial development along the corridor.

Peter Borenstein asked what is the timeline for judging the success of Phase 1? Ms. Williams stated that this would be functioning autonomous shuttles that pass performance testing. They will have capacity for 10 passengers per vehicle. The next public meeting will be about the 90% design and should be soon. Ms. Williams stated there have been years of outreach on this project.

Concerns were raised by several attendees about the autonomous vehicles' ability to detect pedestrians. JTA representatives explained that LIDAR (Light Detection and Ranging) technology and rigorous testing helps to ensure vehicles will 'see' and stop for pedestrians.

Peter Borenstein asked if there are ridership goals for this project? Ms. Williams stated that there are old TCAR Studies (Transit Concepts and Alternative Review) that estimated rider numbers, but she does not have that data available to speak on tonight.

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Phase Two of the project includes final design and construction, system integration, and construction of a new operations building. Phase Three will encompass operations and maintenance.

Ms. Williams discussed a large roll-out map she brought to the meeting. She explained the layout of the route along Bay Street and indicated that due to so much construction happening in the Sports and Entertainment District, there are several options/routes the AVs can use - these were all depicted on the map. Also, there is a separated path for the autonomous vehicles to use near the new proposed Museum of Science and History (MOSH). MOSH would like to have a station inside their museum. There is also a path for autonomous vehicles near the proposed Four Seasons Hotel.

The JTA Test and Learn Facility is used to find AV solutions and investigate other smart technologies. The Autonomous Innovation Center is designed to spur innovation. JTA tests vehicles to ensure people with disabilities can use the vehicles. JTA developed a 'GOLDEN 20' standard for autonomous vehicle needs for public transit. The vehicle that JTA is intending to use will have a lift for wheelchairs.

Lauren Rushing asked if there is any space for bikes in the vehicles. Ms. Williams stated that they are big enough to accommodate only one bicycle.

Additional testing JTA is conducting includes Smart City Technology Testing, such as: light sensing, edge computing, pedestrian detection, and blind spot detection, among others. JTA is aiming for technology to be homogenous on the corridor. Vehicles will start operations at Level 3 Autonomy - a person will be on board the vehicle to monitor operations. JTA is aiming for Level 4 autonomy - where vehicles are fully autonomous and operate without an operator on board.

Peter Borenstein asked who owns the vehicle software. Ms. Williams stated that there are two manufacturers of the software, Oxo and Peron, the others have gone out of business.

Barry Cotter asked how autonomous vehicles detect bicyclists and pedestrians that are not behaving predictably? Ms. Williams and Mr. Dixon explained that the 'Olli' vehicle has 8 LIDAR sensors and 3 cameras, it detects any obstacles around it. There are redundancies in the system and safety is a major design factor. If a system or LIDAR fails, the vehicle will be taken out of service. The system will be monitored from a command center and a vehicle will detect people regardless of the color of clothes they may be wearing.

Len Burroughs asked how many people will be monitoring each vehicle in operation? Initially it will be one person monitoring one vehicle - one to one - then JTA aims to progress to one person monitoring more than one vehicle.

Ms. Williams explained the JTA's timeline of testing and vehicles explored. The United States 'Buy America' regulations for transit vehicles limits JTA's ability to bring 'sleeker' European vehicles to Jacksonville.

The vehicle JTA will be using for the Bay Street Innovation Corridor is the Ford E-Transit, which has a capacity of 10 people. JTA are entering into the Build phase of the project, which runs from March 2024

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to June 2025.

New infrastructure on Bay Street will include a private fiber network for JTA vehicles, shelters with anti-vagrant benches and a minimalist design.

Attendees asked about fare collection. No money will be collected on the vehicles, payment will be through an app, and the fare structure is still being figured out.

Ms. Williams explained JTA's proposed Operations and Maintenance facility in the LaVilla neighborhood. She stated there is an opportunity for Transit Oriented Development, food trucks, music, vendors, and Level 3 electric vehicle chargers. Laurin Rushing asked if bike parking would be located at the facility? Ms. Williams stated that it is not currently planned for that location but is something JTA can investigate adding. There will not be shuttle service from the Operations and Maintenance facility. JTA is investigating having a mobility hub with scooters and bike share near the proposed Ford on Bay location.

Logan Cross asked about how this program will help with revitalizing downtown. Ms. Williams responded it will help people get around downtown. Mr. Cross was curious to know how this project is being integrated with other projects such as the Emerald Trail. Ms. Williams and Larry Roberts mentioned there has been coordination between the City of Jacksonville, JTA and other entities such as Groundwork Jacksonville for several years in advance of this project.

Initially the shuttles will operate on 5-to-8-minute headways, and it will take 15 minutes to travel the full length of the route. The route is divided into several loops that can be rolled out progressively to operations in the design build phase.

Ms. Williams discussed data management for the data collected by the new autonomous vehicles. She stated that you can monetize data, such as the data generated from vehicles scanning and checking for potholes. Each vehicle creates a terabyte of data per day.

She discussed the risks and challenges of the project, including: Buy America requirements, determination of a vehicle's useful life may be difficult, especially for laser printed vehicles such as the 'Olli'. Other challenges include NHTSA waiver acquisition and insurance and liability transfer, federal and state regulations, safety standards and regulations, and performance and acceptance of the system.

Peter Borenstein asked why are bus drivers seen as bad? Ms. Williams stated that this is not the point of the U2C program, the project is not about profit, it's about efficiency and innovation, to give a better quality of life. Ms. Williams was asked by Mr. Borenstein what is the cost per rider using the shuttles, she was not able to provide any numbers at the time. Funding for the project comes from grants and the Local Option Gas Tax.

Ms. Williams concluded by sharing JTA's perspective on what the Bay Street Innovation Corridor and the U2C program mean for Jacksonville. She stated it brings bold thinking and bold outcomes, workforce development, new companies related to autonomous vehicle development and manufacturing, Smart

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City development, potentially a higher tax base, and improved primary and secondary education through autonomous vehicle outreach that JTA continues to offer.

Monty Selim asked if any other cities are trying out this approach? Ms. Williams stated that primarily it is private companies testing this out. JTA is unique in attempting this for public transportation. JTA continues to promote this effort through the American Public Transportation Association and internationally. Lauren Rushing stated that in addition to private development, the City of Altamonte Springs, FL currently runs autonomous shuttles.

V. Wrap-up / Announcements / Next Meeting Info

- Coffee Outside Bike Ride - February 10 at 10 am in Memorial Park, Riverside
- The next BPAC meeting is Thursday, March 7 at 5:30 pm

VI. Adjourn

The meeting adjourned at 7:00 PM.

Copies of presentation materials from the February 1, 2024 BPAC meeting may be viewed or downloaded from the COJ BPAC page on the City of Jacksonville website. A link to the COJ BPAC page is [HERE](#).