

**MINUTES OF THE  
JACKSONVILLE TRANSPORTATION AUTHORITY  
RETREAT SERIES: SESSION III  
SEPTEMBER 2, 2020**

The JTA Board of Directors held a Retreat Series: Session III, September 2, 2020. Board of Directors and staff attended virtually. The Retreat Series included updates by the Board Committee(s).

**BOARD ATTENDEES:** Kevin J. Holzendorf, Arezou Jolly, Debbie Buckland, Ray Driver, and Isaiah Rumlin.

**JTA STAFF ATTENDEES:** Nathaniel P. Ford Sr., Cleveland Ferguson III, Bonnie Todd, Bernard Schmidt, Greg Hayes, Greer Gillis, Andy Rodgers, Kelli O'Leary, Katie Smith, Michael Corbitt, Khisha Dukes and Monique Thompson.

**OTHER ATTENDEES:** Larry Parks, FDOT. And Richard Milian, General Counsel

**WELCOME:** Chairman Holzendorf called the Retreat Series: Session III to order at 9:01 a.m. and welcomed the Board Members, JTA staff and guests.

**PUBLIC COMMENT:** Chairman Holzendorf asked for public comments. There were no public comments.

**CEO REMARKS:** Mr. Ford stated Mr. Schmidt will give an update on the Automation and Innovation Division. This division is engaged throughout the Authority to bring technology and innovative solutions to the forefront of our strategy. He will update the Board today on the overall Ultimate Urban Circulator Program (U<sup>2</sup>C), as well as provide a more detailed overview of the Bay Street Innovation Corridor (BSIC) Project, which is the first Phase of the U<sup>2</sup>C program. The BSIC and associated future phases will be the first ever in the United States to use Autonomous Vehicles (AV) as part of a public transportation network. Earlier this year, an Industry Forum was held in Jacksonville where we shared our bold vision but most importantly, we gave detailed plans and concepts as well as strategies that the JTA had advanced over the last couple of years. The idea was to foster partnerships that would respond to our Request for Qualifications (RFQ) and Request for Proposal (RFP). The challenges of COVID-19 clearly did not stop our momentum; it challenged us to think bolder and out of the box as it relates to solutions. Mr. Ford stated the partnership with the Mayo Clinic, which received international attention showed how we remained ahead of the curve in leveraging technology and automation in response to the pandemic. In May of this year, the JTA reached another milestone with the signing and execution of the BUILD Grant between the US DOT and FTA. This left us well positioned to bring forth shovel ready projects to put us at the front of the line as part of an economic boost post COVID-19. On June 15, 2020, JTA released a two-step procurement for the BSIC Project. The Automation Division has continued to advance this entire program.

**AUTOMATION AND INNOVATION DIVISION UPDATE:** Mr. Schmidt provide the Board with an update on Automation and U<sup>2</sup>C. The Mayo Clinic AV Deployment was the first level 4 Autonomous use case in the US to move COVID-19 specimens. During the four months at Mayo Clinic approximately 30,000 COVID-19 specimens were transported with zero safety incidents. Mr.

Schmidt stated the vehicles were used in mixed-traffic conditions that would mimic what would be seen in the as it relates to Bay Street and Neighborhood extensions.

Mr. Schmidt stated JTA will soon receive two electric 40-foot buses and engaged Artificial Intelligence Modules for the 40-foot buses that would assist Transit Operations and Customer Service. He stated the division continues to explore a partnership with Lilee Systems where they are able to convert and put an Autonomous kit on a 40 foot bus. Lilee Systems has done this successfully internationally.

Mr. Schmidt gave an overview of the eVTOL air taxi service. He stated the aircraft is going through FAA certification. The timeline for the aircraft is 2023 for initial testing. Chairman Holzendorf asked if there are any modifications that would need to be done to the JRTC to have this. Mr. Schmidt stated there are adjacent properties near the JRTC that could be leveraged as landing sites.

Mr. Schmidt gave an overview of the Agile Plan. He stated based on the relationship with the Mayo Clinic and them receiving the Agile Plan they remain engaged. Once in the post COVID-19 phase and economic recovery, Mr. Schmidt anticipates how JTA can provide service to the Mayo Clinic. There is an Agile Plan for the FSCJ South Campus and the team has been asked to look at other locations. Other Agile Plans have been developed for the Jaguars and Jacksonville University. Director Buckland asked what does an Agile Plan cost. Mr. Schmidt stated all Agile Plans would be will be leveraged for revenue. He stated there is some initial start-up cost of about \$85k for infrastructure, setting up GNS antennas, sensors, command center, 2D and 3D mapping. There is a cost per vehicle but this varies from platform to platform and quantity of vehicles. The vehicles can be leased starting at \$10k up to \$25k a month depending on the platform and how you want it built out. As you add more vehicles, vendors can work out a discount. In the case of Mayo Clinic, they are looking at purchasing two or three vehicles at the price of \$200k-\$300k each. Some would rather lease to see how the technology works and others would prefer purchase and JTA would charge for the operating cost.

Mr. Schmidt gave an overview of the Test and Learn Program. He stated relationships were built with AV manufacturers and technology companies directly. Mr. Schmidt stated the team assisted the AV manufactures and technology companies with NHTSA Strategy. He stated feedback was incorporated from First Responders and BSIC Council, interaction with the legal community and the insurance companies. An initiative with JTA's insurance vendor was launched to help them understand the AVs and how to underwrite them. This also helps with IT/Cybersecurity, Operations Plan and use of the Test and Learn platform to understand how to mitigate it.

Mr. Schmidt stated the MOU has been signed for the partnership with FSCJ. He stated the partnership consists of the use of the Cecil Field Test Track, collaborating on curriculum and internships, Agile Plan/Campus Circulator Implementation. JTA leaders are members of the FSCJ Advanced Driver Assistance Systems (ADAS) Tech Advisory Team. This is beneficial to JTA because a grant was awarded to FSCJ by the National Science Foundation to address ADAS and AVS. The Automation Team will help FSCJ with their test track configuration.

Mr. Schmidt gave an overview of the Test and Learn Vehicle Fleet. The Navya shuttle is fully commissioned and operational. It is the third shuttle JTA has tested. Previously, two Easy Mile

Shuttles were tested. Between the Navya and Easy Mile Shuttles, a total of five vehicles have gone through the test and learn program. Mr. Schmidt stated JTA still has the current Navya shuttle but will probably phase it out by end of year. There are 11 certified operators on this vehicle. He stated that JTA took possession of the Local Motors Olli 2.0 approximately 2 weeks ago. It is the next American-made AV shuttle. This vehicle is commissioned and operational at the Armsdale facility and all 11 operators are currently going through training to get certified. The Perrone Robotics Electric Vehicle (EV) Star will be online later this year. It is an all-electric zero emission paratransit vehicle that has been retro-fitted with an autonomous kit.

Mr. Schmidt gave an overview of the milestones achieved by JTA with the Test and Learn Program. He stated JTA has the most Level 4 Operation hours on AV Shuttles than other transit agencies. JTA has the most certified AV operators amongst peers.

Chairman Holzendorf asked who is the owner of all the research and technology for us to share the information. Mr. Ferguson stated as we enter partnerships, no one can utilize the information that JTA is producing due to the trademark and copyright protection that we obtained under the Jax Transit Innovation (JTI) Corporation. We are protecting our Intellectual Property in the United States. Mr. Ferguson stated that JTA and JTA are also in the process of working with the European Union protecting the IP as well as areas where there is an AV interest or manufacturer. We are not trying to foreclose the use of the information but JTA has to be brought to the table and potentially in the form of royalties and licensing fees as we move forwards. This ensures JTA is getting the credit for all of the good work from a policy prospective. Chairman Holzendorf stated it would be important for the new Board Members to know how JTA is structured and why. Mr. Ford stated the history with JTI such as the work with route optimization. JTA was the first agency to do a total system revamp in 2014. Staff members would go to different conferences and see our work being used by contractors and consulting with transit systems to implement the same type of overhaul to their transit system.

Director Buckland stated everything is going really well with the Automation projects. She asked where we could hit a bump. Mr. Schmidt stated what bothers him the most is policy and governance when technology is getting ready to be implemented. He stated they are still working through the insurance. Mr. Ford stated that liability is not up to speed with the technology. Chairman Holzendorf stated his concerns would be Cybersecurity, Technology, where the data is resting, and integration between multiple partners. Mr. Ford stated that is something that staff has been thinking about because of the vulnerability of public transportation. Mr. Schmidt stated an IT and Cybersecurity document has been created. This concern is just another reason why there may be the need for a remote man in control. Mr. Schmidt stated a part of the overall U<sup>2</sup>C is for JTA to participate in the overall smart city initiative. He stated Jacksonville through the TPO launched the Integrated Data Exchange to share information. The data we receive from these vehicles will be more valuable than people can think about today. An example would be one vehicle could have up to five or six sensors. As a vehicle goes down the street it can scan the roadway, not just for the operational dynamics, the data can also be stored for FDOT in regards to conditions of the roadway where there may be potholes. This information can be given live wherever we have our routes.

Mr. Schmidt showed a slide of the U<sup>2</sup>C accomplishments from 2019-2020. He also gave an overview of the U<sup>2</sup>C Program. Mr. Schmidt stated the ability to accomplish the BSIC will feed the neighborhood extensions because those are all at-grade and at street level. The ability to accomplish

Autonomous Avenue feeds the remaining Skyway conversion. Mr. Schmidt stated the funding for the project is \$44 million.

Mr. Schmidt stated the BSIC Project is anchored by the Bay Street Innovation Council. The Council Executive Committee has met monthly since March 2019 and Technical meetings are held frequently. There is interaction with the Jaguar organization and Cordish Development to discuss what will happen with the Sports and Entertainment district. From this Council, there has been the creation of the First Responders Council, which consist of the Fire Department, EMT Services and Road Rangers.

Mr. Schmidt stated the team is still working on Fiber and Technology Overlay, Third Party Agreements, Corridor Signage, Right-of-Way and Miscellaneous Issues and Policy & Governance Issues. Mr. Schmidt stated the detailed requirements have been completed with Concept of Operations, System Requirements and Systems Engineering Management Plan. The FTA has assigned a PMOC and there is monthly interaction and reporting. Mr. Schmidt showed a snapshot of the Monthly Progress Report for the PMOC. The FTA and PMOC gives feedback on the reporting. Mr. Schmidt stated the BSIC Project is in an active two-step Procurement. He showed a snapshot of the Procurement process.

Mr. Schmidt gave an overview of the potential model that was given to some of the potential participants. He also explained the key takeaways on the BSIC Procurement. Mr. Schmidt stated three AV-DBOM Entities submitted an RFQ on August 28, 2020. He stated the submissions represent local, national and international interest by 15 different companies which have agreed to collaborate in effort to potentially advance to the second step phase of the procurement. These companies are Balfour Beatty, Perrone Robotics, Transdev, Miller Electric, Oceaneering, Haskell, Stantec, WGI, Kiewit, First Transit, Siemens, 2getthere, Superior, Metric Engineering and BEEP.

Chairman Holzendorf inquired about dedicated lanes during events for people that ride the Autonomous Vehicles. Mr. Schmidt stated the team took part in some game day scenarios with JSO and those familiar with how the traffic management happens, synchronization of the lights and what it takes for that to happen. This is something that we will need to work on with JSO, FDOT and others. Chairman Holzendorf stated we know dedicated lanes work. Mr. Ford stated part of the challenge is we have multiple stakeholders that we are trying to negotiate and work through. FDOT and the City have been very supportive in getting us to where we are today because we would not have been able to issue the RFQ and move to the RFP if we did not have some framework in terms of the lanes and how they would be setup. He stated it is his understanding once this is setup there will be an opportunity to circle back with FDOT and the City to make sure that this investment is enhanced and maximized. Chairman Holzendorf stated he wants to ensure as a Board, we are doing what we should policy wise. He wants to make sure the Board does their due diligence with a large project like this. Mr. Ford stated we would love to have dedicated lanes. The infrastructure that is being installed may be modified in the future. Mr. Ford asked Director Park if in the future there would be an opportunity to make adjustments based on traffic flows and utilization. Director Parks stated there is always an option to re-look at things. However, based on traffic analysis and break down bridge overhead structures, the traffic analysis shows the four lanes are needed. There is also temporary traffic patterns on game day.

Chairman Holenzdorf asked about the minority participation and if it is a requirement or a recommendation. Mr. Schmidt stated it is a strong recommendation. The JTA has expressed to the AV-DBOM that it is upheld in most of the procurement it has conducted. Chairman Holenzdorf stated we do a good job with minority participation and commend the JTA staff to ensure we are being stewards of the taxpayer's dollars. Mr. Ford stated the DBE participation has been over 30 percent.

Mr. Ford stated it was important to share with the firms that are actively competing for the project. He stated the best and brightest in the world are coming after the project. Staff also wanted to make sure they presented to the Board the firms that were interested from a Procurement process to ensure this procurement does not have any hiccups. Mr. Ford asked Mr. Milian to remind the Board of the Cone of Silence. Mr. Milian stated JTA has a very stringent Cone of Silence provision and want to make sure every Procurement is fair and transparent. Particularly this procurement due to its importance to JTA and Jacksonville. Mr. Milian read the Cone of Silence from the Procurement policy to the Board. He stated if anyone has any questions regarding the Procurement to direct them to Brad Cummings and his team in the Procurement Department. Director Parks asked when does the Cone of Silence process end. Mr. Milian stated it will end when a Notice of Award is posted by the JTA Board.

**ROUNDTABLE:** Director Buckland stated she is glad there is ability to pivot on the U<sup>2</sup>C project. She appreciates the work on the projects that are being done and the flexibility. Chairman Holenzdorf requested a list of the firms in the procurement be sent to all the Board Members. Mr. Ford stated a hard copy of the presentation will be sent as well. Director Buckland stated she would like to review the processes.

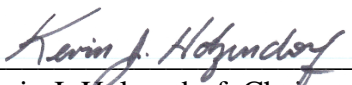
Chairman Holenzdorf stated some research has been done and that he has a memo drafted for Council Member Becton to respond to his questions.


**ACTION ITEMS/NEXT STEPS:** Mr. Ferguson stated follow-up items were identified related to an updated on JTI and Enterprise Risk Management. He will ensure these are scheduled in addition to the Board receiving the memo.

**ANNOUNCEMENTS/ADJOURN:** Chairman Holenzdorf stated Retreat Series: Session IV will be held on September 17, 2020 at 9 a.m.. Retreat Series: Session V will be held on September 18, 2020 at 11:00 a.m.. The Board Meeting will be held on September 24, 2020.

There being no more discussion, the Retreat Session adjourned at 11:13 a.m.

SEAL

  
Kevin J. Holenzdorf, Chairman

  
Debbie Buckland, Secretary