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**CITY COUNCIL LUNCH-AND-LEARN MEETING MINUTES  
JTA UPDATE – ULTMATE URBAN CIRCULATOR (U<sup>2</sup>C) PROGRAM**

**Lynwood Roberts Room, 1<sup>st</sup> floor, City Hall  
September 23, 2019  
11:00 a.m.**

**Location:** Lynwood Roberts Room, 1<sup>st</sup> floor, City Hall – St. James Building; 117 West Duval Street

**In attendance:** Council Members Scott Wilson (President), Aaron Bowman, Michael Boylan, LeAnna Cumber, Al Ferraro, Reginald Gaffney, Tommy Hazouri, Joyce Morgan, Sam Newby, Ju’Coby Pittman, Ron Salem, Randy White

**Also:** Nathaniel Ford, Jessica Shepler, Bernard Schmidt, Greg Hayes – JTA; Paige Johnston – Office of General Counsel; Tommy Carter and Heather Reber – Council Auditor’s Office; Steve Cassada and Louie Marino – Council Staff Services; Jeff Clements – Council Research Division; Jordan Elsbury, Rachel Lockhart, Palmer Kuder - Mayor’s Office; John Pappas – Public Works Department; Cheryl Brown – Council Secretary/Director

**Meeting Convened:** 11:10 a.m.

President Wilson called the meeting to order and welcomed JTA CEO Nat Ford to begin the presentation.

Mr. Ford said the U<sup>2</sup>C project will serve the community for decades to come as the successor to the Automated Skyway Express. He noted that the originally conceived 10-mile Skyway system never developed as planned and has only incorporated 2.5 miles of guideway throughout its last 25 years of service. The U<sup>2</sup>C represents the future of urban center transportation and the US Department of Transportation is very supportive of and very interested in how the technology will be deployed to serve future mobility needs. He noted that downtown is in the midst of a redevelopment boom and the JTA is poised to help meet the downtown’s mobility needs.

Phase 1 is the Bay Street Innovation Corridor at-grade improvements. Phase 2 is conversion of the Skyway from the Convention Center to Jefferson Street station. Construction time for Phase 1 will be 3 years, with probably 7-10 years for total system completion.

Mr. Ford introduced Brad Thoburn of Michael Baker Engineering, Inc., consultant to JTA, to give the history of the Skyway. Planning for the Skyway began in the early 1970s and was a cooperative effort of the City, the JTA, FDOT, and private sector entities to deal with downtown congestion and future growth projections. The US DOT funded 5 transit demonstration projects at the time nationally and funded the Skyway starter leg in 1985. The initial leg of the system started operating in 1989 and was expanded in 1997 and 2000. When the system was extended in 1997 to FSCJ and across the St. Johns River via the new Acosta Bridge, the vehicles were changed over to Bombardier prototype cars that were not used by any other system in North America, which has been problematic in retrospect. In 2014 the costliness of vehicle maintenance and the difficulty of getting parts for discontinued vehicles led to the appointment of a study committee to assess future prospects for the system. That study process found that the guideway infrastructure was in good condition but the vehicles and operating system were problematic, and the industry was evolving to different technologies.

Two study committees considered a number of alternatives for downtown circulator mobility – overhaul the Skyway and install new vehicles, tear down the guideway and abandon the system, streetcars, bus rapid transit, trolley buses, etc. A citizen survey was conducted and received over 1,600 responses with a wide variety of opinions. Supporting downtown development and enhancing connectivity between modes was seen as very important. Six general policy statements achieved consensus and those factors drove the decision-making process from that point. The Skyway modernization process resulted, which began to look at technological alternatives in 2016 that led to consideration of autonomous vehicles running at-grade as part of “road diet” planning and connecting important, busy nodes in downtown and the surrounding areas that were not being served.

The desired system has 4 goals: 1) frequent service, 2) flexibility, 3) be a driver of economic development, and 4) ability to be phased in. The rapid development of autonomous vehicles caused them to be strongly considered and ultimately to be the selected technology. The JTA board endorsed the U<sup>2</sup>C system with autonomous vehicle technology in early 2017. The US DOT has been very supportive of the planning process and of the conversion process of the Skyway to a new technology, which will be a useful model for the transit industry.

JTA’s CFO, Greg Hayes, said that the Skyway was carrying approximately 1 million riders per year at a cost of \$6 million in operating expenses before the closure of the Convention Center and Jefferson Stations due to adjacent construction projects. The Skyway does not collect passenger fares and does not, by ordinance, receive any sales tax revenues. At its peak when fares were still being charged, Skyway ridership produced only 5% of operating revenue. Mr. Hayes said that the shutdown and demolition of the existing Skyway service would entail a \$44.5 million repayment to the federal government of the remaining useful life value of the system (\$42 million for the guideway structure, \$2.4 million for the vehicles), plus at least \$25 million for demolition of the guideway structure. JTA’s receipt of a \$12 million BUILD grant and a \$1M transit oriented development (TOD) grant shows the USDOT’s confidence in Jacksonville’s proposal.

Bernard Schmidt, JTA’s Vice President for Automation, described the 4 phases of the overall project:

- 1) Bay Street Innovation Corridor
- 2) Autonomous Avenue (Skyway conversion between Jefferson and Convention Center stations)
- 3) Remaining Skyway conversions
- 4) Neighborhood extensions

An implementation strategy has been developed that uses phases 1 and 2 above as the launching points. Traffic and parking studies have been done on downtown and various technologies are being evaluated. The Bay Street Innovation Corridor is fully funded by the BUILD grant, FDOT, JTA, JEA, North Florida TPO and private sector funding. A Bay Street Innovation Corridor Innovation Council has been formed of

government and private sector stakeholders who have been meeting monthly. Autonomous Avenue will be the proof of concept for urban area transit infrastructure nationwide. Structural and engineering evaluations are underway and should be done by the end of 2019. The at-grade extensions to the reformatted guideway will eventually total the 10.5 miles originally envisioned for the Skyway in the 1970s.

In response to a question from Council Member Gaffney about when the expanded system might get to Springfield, Main Street and Shands Jacksonville Medical Center, Mr. Schmidt estimated 3 years for Bay Street Corridor construction, then extensions follow later on. Regarding whether the City be asked for funding later in the process, Nat Ford said that was not currently envisioned. JTA will use state and federal funds, private partnerships, etc.

In response to a question from Council Member Hazouri about the total cost of the Skyway as it exists today, Mr. Ford said \$182 million originally, which has now depreciated down to \$45 million of value left. Regarding whether the USDOT will forgive the repayment of the remaining value given its use its components for the new system Mr. Ford said that the City and JTA committed, by the acceptance of the federal grants, to use the system for the full remaining useful life of the assets. They're negotiating with USDOT about the conversion of the guideway so as to avoid any default and mandated grant repayment.

Council Member Boylan asked if the City can keep the guideway and just pay USDOT back for the \$2.4 million of remaining vehicle value, and Mr. Ford said they that have talked to USDOT about that possibility.

In response to a question from Council Member Salem about whether consideration has given to having the system cross the Mathews Bridge to Arlington, Mr. Ford said that autonomous vehicles (AVs) could potentially do that.

Council Member Morgan inquired about the cost of refitting the guideway for new vehicles. Mr. Ford said the current estimate is \$30 million for Jefferson Station to Convention Center conversion (1/10 of the overall system). He said JTA will learn a lot by doing that project about how conversion works and what it really costs.

Council Member Pittman said she's excited by the alignment of this plan with the development patterns downtown and thinks it can be a model for doing things right and completing what was started long ago.

Council Member Cumber asked about the nature of the unsolicited proposal to JTA from a private company to participate in the U<sup>2</sup>C project. Mr. Ford replied that it proposed a concession to operate the system. When asked if the City Council would Council a role in approving an operations concession, Mr. Ford said no, that's the JTA board's call to make. Asked about how Skyway ridership is determined without fares being charged, Mr. Ford said they use turnstile counts along with JTA and American Public Transit Association manual spot checks. Council Member Cumber noted that many people go in and out of the Skyway stations who don't ride the train – some charge their cellphones at power outlets, others are seeking the shade of the stations. While some who do ride the system are true commuters, some are the homeless just trying to stay out of the rain or heat. She questioned how many buses would need to be added to the JTA fleet to carry the true travelers if the Skyway were shut down. The City and JTA need to be adaptable to future transportation changes, which may not have any use for the fixed guideway. She said the JTA is proposing to make a substantial investment in technologies that may not be viable in the future. Mr. Ford said that a decision needs to be made about the Skyway because it's nearing the end of its useful life, regardless of what the future transit trends may be. There's likely always going to be a need for a fast, efficient downtown circulator, and the guideway is already there and would cost a lot to take down. He said the Jacksonville can't afford to offend the USDOT by changing its mind and abandoning

previous expensive federal investments. Ms. Cumber responded that the City is preparing to pay back the National Park Service for the grant that helped purchase the Metropolitan Park property because it doesn't make sense any more; the City could do the same for the Skyway.

In response to a question about vehicle capacity, Mr. Ford said they are looking at different vehicles holding 12 to 20 passengers. In response to a question from Council Member Hazouri about how much longer the Skyway needs to be operated before the useful life of the system is reached and the USDOT repayment requirement is finished, Mr. Ford estimated at least 10 years if not more. Council Member Bowman asked if a system were being designed from scratch today, would it have an elevated guideway? What does that add to the system? Mr. Ford said an elevated guideway provides a speed advantage over at-grade systems, unless those systems have a dedicated lane on the ground. While this is an advantage, the cost and time for construction outweighs the speed advantage so elevated systems are unlikely to be built in the future. In response to a question from Council Member Ferraro about whether other users put their private vehicles on the guideway, Mr. Ford said it is a possibility (i.e. FedEx, Tesla, etc.) when automated vehicles (AVs) can all communicate and share the roadway.

Council Member Morgan asked if the system will need dedicated lanes for AVs at-grade. Mr. Ford said that would be decided on a case-by-case basis depending on what the particular roads can accommodate. He said there can't be a "one-size-fits-all" policy. The system may use different sizes of vehicles at different times of day, or multiple trained vehicles vs. single vehicles. Ms. Morgan said that we can't really question the decisions made 30 or 40 years ago, which were made with the best information available at the time but maybe turned out not so well later. You can't always predict the future. Mr. Ford said JTA want to be flexible and adaptable in the future as things change and they're trying to anticipate every possible eventuality. Council Member Cumber asked if JTA was looking at shared use lanes on Bay Street. Mr. Ford said they hope to have some kind of lane separation initially, but the technology will accommodate shared use. Ms. Cumber cautioned against defeating the aim of complete streets and pedestrian friendliness by providing separate lanes for AVs in limited rights-of-way. She urged combining AVs with pedestrian compatibility and a mixed-use environment. Returning to the earlier question about elevated guideways, Mr. Ford said that despite its speed advantage it's just too expensive to be practical. JTA is already looking at an estimate of \$300 million for construction of the 10 mile system. Also elevated infrastructure is too restrictive and locks you in to a specific location, so is not flexible enough to meet changing development patterns. Council Member Hazouri congratulated the JTA on taking a difficult situation and previous investment and making the best of it.

Mr. Ford said the U<sup>2</sup>C system proposal is getting world-wide attention and will be a trend setter in lots of industries, from mass transit and vehicle design and operating systems to real estate development.

**Meeting adjourned:** 12:48 p.m.

Minutes: Jeff Clements, Council Research Division  
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