

**TO:** JTA Board of Directors  
Long Range Planning and System Development Committee

February 23, 2017

**FROM:** Brad Thoburn  
Vice President, Planning, Development and Innovation

**SUBJECT:** Approval to Enter Into the Development Phase of the Ultimate Urban Circulator Project

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**RECOMMENDED ACTION**

Staff recommends the Board support and approve the recommendations of the Skyway Modernization Program (SMP) Report and enter into the development phase of the Ultimate Urban Circulator (U<sup>2</sup>C) program.

**ALIGNMENT WITH STRATEGIC GOALS**

This project advances the Authority's Goal of providing Mobility and is specifically identified as a Fiscal Year 2017 Authority Objective.

**SUMMARY OF NEED**

The U<sup>2</sup>C will result in a major capital investment of the JTA, and entry into the development phase of the program is critical to continue the work towards a modern and effective urban circulator that is a part of an integrated JTA transit system.

**BACKGROUND AND HISTORY**

On December 10, 2015, the JTA Board approved Resolution 2015-30 supporting the continued operation of the Automated Skyway Express (Skyway) and development of a SMP.

On December 8, 2016, JTA staff presented the recommendations of the SMP Report. After extensive analysis, the report finds that JTA is uniquely positioned to create what will be referred to as the U<sup>2</sup>C. The U<sup>2</sup>C program will provide mobility, connectivity and sustained economic growth and vibrancy for Jacksonville. This can be achieved by utilizing the existing investment in the elevated Skyway and employ rapidly emerging autonomous vehicle technology.

A fully built U<sup>2</sup>C can reach beyond the existing Skyway system in a cost effective manner to serve existing and planned developments. The proposed U<sup>2</sup>C system would achieve the purpose of a downtown circulator system by:

- Providing high frequency service
- Offering service flexibility
- Including extensions that can be elevated or at the street level

The U<sup>2</sup>C System Plan recommends extensions to existing and planned development that will allow it to function as a true circulator system and connect to the larger JTA transit system.

These extensions would connect Downtown to nearby neighborhoods and allow people in the urban core to reach key employment, residential, retail, medical and educational centers. The extensions recommended are:

- Riverside to Five Points
- Brooklyn
- Sports Complex/Shipyards
- San Marco
- Southbank Medical
- Redeveloped Southside Generating Station
- Springfield
- UF Health

To enhance function and connectivity, it is recommended that a new river crossing be included as part of the U<sup>2</sup>C System Plan to connect the developing areas of the eastern ends on the Northbank and Southbank. It is envisioned that this crossing would be for transit, bicycles and pedestrians only and create an inner loop for the U<sup>2</sup>C and the Riverwalk.

Autonomous Vehicle (AV) technology is the preferred technology for meeting the desired attributes of the U<sup>2</sup>C. AV technology is advanced enough to function on the elevated guideway today and at the street level in the future. The U<sup>2</sup>C concept envisions:

- A larger fleet of smaller vehicles providing higher frequency service
- Vehicles that ideally could hold 15 to 25 passengers
- Vehicles that could operate individually or be connected virtually as a train to provide high capacity during times of peak demand
- Street level extensions that could utilize separated transit lanes and signal priority to ensure a high level of speed, frequency and reliability
- As technology advances, the capacity for extensions into mixed traffic

To implement the U<sup>2</sup>C program, the following steps should be taken:

- Implement a vehicle rehabilitation and maintenance program aligned with a transition timeline
- Identify the preferred vehicle
- Develop a conversion plan for the vehicles, operating system and existing infrastructure
- Prepare project development and implementation phasing plan, and position the phases to enter project development under Federal Transit Administration and Florida Department of Transportation (FDOT) capital funding programs

## **PROCUREMENT OVERVIEW**

Not Applicable

**FISCAL IMPACT**

A critical step in the process will be the evaluation of potential funding opportunities associated with various phases of the program. There are limited sources of funding for maintenance of the existing vehicles. However, system expansion and technology conversion that improves the function and capacity of the system can access a variety of state and federal funding opportunities. It is very important that the project development process is done in a manner that positions U<sup>2</sup>C phases for state and federal funding. JTA will consider using the Transit Concepts and Alternatives Review process developed by FDOT to achieve this.

**DBE PARTICIPATION**

Planning, project development and program management services provided under this effort will be performed by the SMP consultant (RS&H) which committed to a 25 percent DBE goal.