***February 9, 2017***

***To:*** Transit Committee

***From:*** Darrell Johnson, Chief Executive Officer

***Subject:*** Overview of Options for OC Streetcar Operations and Maintenance

## *Overview*

The Orange County Transportation Authority is the lead agency for the design, construction, operations and maintenance of the OC Streetcar in the cities of Santa Ana and Garden Grove. As part of the request for a full funding grant agreement to the Federal Transit Administration, an organization plan is required to prepare for future operations and maintenance of the service. Staff has developed key considerations for the evaluation of options for operations and maintenance of the OC Streetcar for Board of Directors' review.

## *Recommendation*

Direct staff to return to the Board of Directors with an evaluation of the OC Streetcar operations and maintenance organization plan based upon the key considerations.

## *Background*

Revenue service for the OC Streetcar is scheduled to begin in December 2020. As part of the full funding grant agreement to the Federal Transit Administration (FTA), the Orange County Transportation Authority (OCTA) is required to develop a plan for the organization of the system's operations and maintenance (O&M).

The OC Streetcar operations will require specialized skills to support operations, including operational control systems, electrical systems, tracks, switches, signals, and communications. The maintenance of rail vehicles and electrical systems represent new responsibilities for OCTA. Additionally, all aspects of safety and security of the OC Streetcar will have to meet strict requirements and obtain approvals from both the FTA and the California Public Utilities Commission.

***Discussion***

The initial step in organizing OC Streetcar O&M is for OCTA to determine if the O&M is to be provided through in-house resources with OCTA employees or to be contracted out in various structures to the private sector.

Four operating options are proposed for consideration:

In-House O&M

The in-house O&M option is defined as OCTA hiring employees to manage operations, operate vehicles, maintain vehicles, and maintain right-of-way (ROW). Specific technical functions could be contracted, but the majority of O&M would be performed by OCTA employees.

O&M Contractor

The O&M contractor would be procured by OCTA to provide management, operations, vehicle maintenance, and ROW maintenance for a five- to ten-year period. The majority of responsibilities would be assigned to the O&M contractor, and OCTA would provide contract administration and oversight.

Management by Private Contractor

Management by private contractor involves contracting with a private entity to oversee and manage the operation of the system by providing key management staff under a contract with OCTA, and OCTA employees serving as operators, and vehicle and ROW maintainers.

In-House Operations/Maintenance Contractor

Under this option, OCTA would provide management and operations with OCTA employees and procure a contractor for vehicle and ROW maintenance. This option would utilize OCTA's experience with transit operations and contract for the specialized maintenance services associated with a streetcar operation.

Through the provision of bus services, OCTA has demonstrated success with both in-house and O&M contractors. The proven track record indicates that OCTA has the experience necessary to pursue any of these four options. However, it is important to take into consideration that streetcar services are a more specialized mode of service with which OCTA has no prior experience.

To determine which of the models best fits OCTA's needs both operationally and financially, the following key considerations are proposed to evaluate each of the operating options.

Cost

Similar to bus operations, the annual operating costs for project operations include a high percentage in labor, inclusive of wages and benefits. Other factors that influence operating costs, depending upon the operating option, are contract administration expenses, overhead, and specialized services, such as electrical services for the overhead contact system and traction power substations.

Operational Flexibility

Small, startup streetcar systems depend upon employees that have multiple skills to support O&M. Flexibility is needed in job responsibilities and work assignments. Lack of flexibility may lead to higher costs for operation. Many of the specialized tasks involved are not full-time jobs in an operation of less than ten scheduled trains operating daily. The initial OCTA operation calls for a maximum of six trains operating daily. Flexibility is needed in utilizing employees for several different tasks.

Quality of Service

The ability to deliver safe, reliable and courteous service with good on-time performance and a minimum of missed trips and service interruptions is critical. The factors influencing the quality of service include the management of the operation, effectiveness of the equipment, and communications to customers.

Organizational Impacts

The ability to incorporate the operation of the OC Streetcar into the OCTA organization ensures good coordination between the bus program and the OC Streetcar operation. Organizational impacts also include the amount of effort needed to recruit experienced personnel to direct, operate, and maintain the OC Streetcar service. A greater reliance on outside resources will be necessary for additional training.

Qualifications of Personnel

Ability to attract experienced personnel in key positions and the ability to retain employees over a long period of time will be critical to the OC Streetcar project. There is a shortage of personnel in the job market experienced in managing and maintaining streetcar operations due to the relatively recent introduction of modern streetcar systems and the lack of lengthy experience with these operating systems. OCTA or a contractor may experience challenges in obtaining qualified personnel with direct streetcar experience.

Attachment A includes a description of how other streetcar systems in the United States, either in service or in the planning process, have established their respective O&M structures. In 2001, Portland introduced the first modern streetcar operation in mixed traffic in the United States. Since that time, ten other cities have established modern streetcar systems, and three more have selected an organizational approach for operations.

Of the six cities with prior rail experience, five of them have selected in-house operations. Two cities had rail experience but different agencies as the owner: Atlanta and Washington D.C. Atlanta chose to operate in-house, but has commenced a process to transition to an O&M contractor. The remaining six cities had no prior rail experience, and of these, five selected the O&M contractor option and one (Tucson) selected management by private contractor. To date, no modern streetcar is operated with the mixed in-house operations/maintenance contractor option.

Next Steps

Pending Board of Directors (Board) feedback on the key considerations, staff will return to the Board in March 2017 with a qualitative analysis of the advantages and disadvantages of each of the four options. Additionally, a cost comparison will also be provided.

The O&M strategy selection is needed to complete the O&M organization plan. The O&M organization plan is a required document that will be submitted to FTA in April 2017, as part of the full funding grant agreement application.

***Summary***

Staff is seeking Board feedback on the key considerations for the evaluation of options for the OC Streetcar O&M organization plan prior to presenting a detailed analysis on the organization options to the Board in March 2017.

***Attachment***

A. Modern Streetcar Systems Operation and Maintenance Structure (Planned and In Service)

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