

**Board Report**

---

**File #:** 2019-0151, **File Type:** Contract**Agenda Number:** 24.

---

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE  
JULY 18, 2019****SUBJECT: A650 HEAVY RAIL VEHICLE OVERHAUL AND CRITICAL COMPONENT  
REPLACEMENT PROGRAM****ACTION: APPROVE RECOMMENDATIONS****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to:

- A. INCREASE the Life-of-Project (LOP) budget to Contract No. A650-2015, for the Heavy Rail Vehicle Overhaul and Critical Component Replacement Program (OCCRP), by \$6,047,723 increasing the total Life-of-Project (LOP) budget from \$99,061,908 to \$105,109,632;
- B. EXECUTE Contract Modification No. 4 to Contract No. A650-2015, with Talgo Inc., for the Heavy Rail Vehicle Overhaul and Critical Component Replacement Program (OCCRP), for the truck frame inspection and repair services in the firm-fixed price amount of \$5,054,030; and
- C. EXECUTE Contract Modifications under this Contract for up to \$1,000,000 per Contract Modification.

**ISSUE**

During a routine vehicle inspection, cracks were identified on the truck frames of the original Option A650 heavy rail vehicle fleet. This fleet, consisting of 74 heavy rail vehicles and twelve (12) spare truck frames, is currently undergoing a modernization effort. Inspection services are required to identify additional truck frames present with cracks among the fleet. Repair services are required should cracks be identified during the inspection effort.

Inspecting and repairing the vehicle truck frame is a good engineering practice for the foundation of the whole rail vehicle and promotes the safety of the rail vehicle's critical sub-systems. Having a single reliable firm perform this work will streamline the inspection, repairs and warranty process and minimize the impacts to revenue service.

**BACKGROUND**

The Metro Red Line opened in January 1993. The existing Option Order vehicles have been in

revenue service for an average of twenty-five (25) years.

Metro places the highest priority on the safety of our customers, the public, and our employees. To that extent, there is a constant focus on taking proactive measures to maintain our rail vehicle fleet in a State of Good Repair and seek innovative approaches to prevent accidents on our rail system.

During a routine vehicle inspection, cracks were observed on a number of truck frames used on the A650 Heavy Rail Vehicles. Metro's Rail Vehicle Engineering (RVE) immediately developed an inspection and repair procedure, which included using magnetic particle inspection (MPI) on all mating members, welds and beam surfaces. Two (2) of the truck frames that were found to have cracks were then sent out to a local vendor for additional inspection, then repaired. It was then determined that the entire fleet would require inspection and repair if needed.

Several inspection and repair options were considered to avoid impacting revenue service and the ongoing modernization effort, including using a local vendor to perform this work. However, it was determined that having Talgo perform the inspection and repair on all 74 Option A650 heavy rail vehicles and twelve (12) spare truck frames currently undergoing a modernization effort was the fastest and most economical way forward with the least impact to revenue service and the ongoing modernization effort.

## **DISCUSSION**

To mitigate this issue, staff proposes performing non-destructive testing (NDT) on all 74 Option A650 heavy rail vehicles and twelve (12) spare truck frames currently undergoing a modernization effort. After the testing is complete, truck frames identified with cracks shall be repaired and repainted prior to re-assembly.

If the contract modification is approved, Talgo Inc. shall perform the testing and inspection on the 74 Option A650 heavy rail vehicles currently undergoing a modernization effort and the twelve (12) spare truck frames.

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Disadvantaged Business Enterprise (DBE) goal for this procurement as it is not applicable. This procurement falls under the Federal Transit Administration's (FTA) Transit Vehicle Manufacturer (TVM) goal in accordance with 49 Code of Federal Regulations (CFR) Part 26.49. However, Talgo Inc. has established a 6.51% DBE goal under the FTA TVM goal.

## **DETERMINATION OF SAFETY IMPACT**

Approval of this item will have a direct and positive impact to system safety, service quality, system reliability, maintainability and overall customer satisfaction.

## **FINANCIAL IMPACT**

The approved LOP budget for CP 206038 - A650 HRV Midlife Modernization Project is \$99,061,908. This amount includes funds for the HRV Modernization project and Contract Modification No.1, 2 and

---

3. There are also funds allocated for Professional Services, Metro Labor, and Project Contingency. The requested LOP increase of \$6,047,723 also includes other technical and program management support services. The LOP will increase from \$99,061,908 to \$105,109,632.

This contract modification action will not impact the FY20 Budget.

Since this is a multi-year contract/project, the Cost Center Manager, Project Manager, and Senior Executive Officer, Vehicle Engineering and Acquisition will be responsible for ensuring that project costs are budgeted in future Fiscal Years.

#### Impact to Budget

The funding sources for this project may come from Transportation Development Act (TDA) Article 4, Cap and Trade, and other State and Federal funding. Funding will be allocated as funding allocations and opportunities arise. Use of these funding sources will maximize allowable funding mechanisms given approved funding provisions.

#### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Approval of this recommendation supports the following Metro Strategic Plan Goal 5) Provide responsive, accountable, and trustworthy governance within the Metro organization. This project will improve safety, service, and reliability in an effort to provide a world-class transportation system that enhances quality of life for all who live, work, and play within LA County.

#### **ALTERNATIVES CONSIDERED**

The Board may choose not to approve these contract modifications. However, this alternative is not recommended. A catastrophic failure of the vehicle truck frame could cause a major disruption in service, thus directly impacting customer safety and customer service.

#### **NEXT STEPS**

Upon Board approval, the contract modification will be exercised with Talgo, Inc.

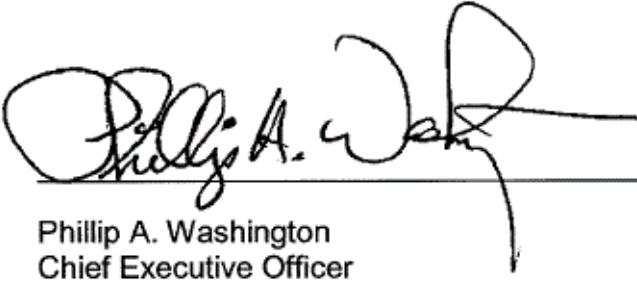
#### **ATTACHMENTS**

Attachment A - Procurement Summary  
Attachment B - DEOD Summary  
Attachment C - Contract Modification Log  
Attachment D - Funding & Expenditure Plan

Prepared by: Andrew Kimani, Sr. Manager, Project Manager, (213) 922-3221  
Jesus Montes, Sr. EO, Vehicle Engineering & Acquisition, (213) 418-3277

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108

Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington  
Chief Executive Officer