



## Board Report

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### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE AUGUST 18, 2022

**SUBJECT: METRO RED AND PURPLE MAINLINE RAIL FASTENER REPLACEMENT**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATION**

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer to award a 60-month, Firm Fixed price Contract No. OP8666000 to Transdev Rail Inc., the lowest responsive and responsible bidder, for the purchase of Metro Red and Purple Mainline Fastener Replacement for a not-to-exceed amount of \$28,703,169.90, inclusive of sales tax. This recommendation is subject to the resolution of any properly submitted protest(s).
  
- B. INCREASING the Life of Project (LOP) Budget for the Metro Red and Purple Mainline Fastener Replacement, capital project number 205125, by \$8,850,000 from \$28,130,000 to \$36,980,000.

#### **ISSUE**

In May 2021, the Board approved the Metro Red and Purple Mainline Fastener Replacement with a LOP budget of \$28,130,000 as part of the adopted FY22 annual budget. At the time of the project scope development, the LOP budget was based on the best available estimate of the cost of replacing heavy rail fasteners along with the Red and Purple mainlines. Due to the increase in economic costs since the development of the cost estimate, an increase is necessary for the LOP Budget to purchase mainline fasteners for replacement for both the Red and Purple Lines.

Additionally, due to the Red and Purple Lines operating heavy rail service for over 27 years, the mainline Type 1 rail fasteners have reached the end of their useful life, and replacement of these rail fasteners is required.

#### **BACKGROUND**

The Type 1 rail fasteners, manufactured by LORD Corp., were installed during the original

construction of the Red Line and have been in use since revenue service started in 1993. The original fasteners were designed with a life expectancy of 25 to 30 years. The continuous rail service in the underground tunnel environment has led to some fasteners to wear and crack. The Track Maintenance Department has been inspecting the fasteners regularly and replacing the failed fasteners when needed. However, this maintenance work has caused rail service to be impacted as trains are required single-tracked for replacement, or train speeds are required to be significantly reduced while repairs are made. The Maintenance and Engineering Department completed an examination of the condition of the mainline fasteners and determined that an entire replacement of Red and Purple mainlines should be performed using dedicated resources within a specific timeframe.

## **DISCUSSION**

The scope of work involves removing approximately 112,000 of the original Type 1 fasteners and installing new and enhanced Type 1 fasteners with an improved life expectancy of 30 to 35 years. The enhanced Type 1 fasteners have greater durability specialized for underground tunnel environment environments. As a State of Good Repair (SGR) project, the fasteners are critical infrastructure assets and must be replaced promptly. The work is scheduled to be completed within five (5) years. Replacement of the fasteners will increase the reliability of the Red and Purple Lines while preventing service disruptions caused by rail fasteners that fail.

Staff has estimated a LOP increase of \$8,850,000 to proceed with the award of Contract No. OP8666000 in support of the Red and Purple Lines project scope. The increase in the LOP is mainly attributed to increased labor costs to replace fasteners to complete this work per the schedule, engineering design and project management support necessary to oversee design submittals and ensure timely project completion of this effort, and contingency related to unforeseen price increases for critical materials along with change orders that may be required during the construction phase of this work. Please refer to Attachment B for the cost breakdown of capital project 205125

This project is part of Metro's commitment to delivering a robust SGR program that invests in modernization, enhancement to renew asset life and reduce asset breakdowns that impact daily service and customer experience.

## **DETERMINATION OF SAFETY IMPACT**

Rail fasteners directly impact the safety of train movements as they keep the rail fixed to the appropriate track gauge and prevent the rails from shifting. A train derailment can occur if fasteners do not hold the rail at the appropriate gauge and cause the rail to shift.

In accordance with Metro's SGR requirements, fasteners that have reached the end of their useful life must be replaced in a timely manner to comply with safety and reliability standards, alongside meeting Federal Transit Administration and California Public Utilities Commission regulations.

## **FINANCIAL IMPACT**

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This action will increase the LOP budget by \$8,850,000 for capital project 205125. For FY23, \$5,000,000 in existing and approved funding will be provided from capital project number 205125 - Metro Red and Purple Mainline Fastener Replacement, cost center 3960 - Infrastructure Renewal Program, Account 53102 - Acquisition of Equipment. Since this is a multi-year contract, the Project Manager will ensure that the balance of LOP funds is budgeted in future fiscal years.

### Impact to Budget

The source of funds for this action includes the Federal, State Transportation Development Act (TDA), Measure R, and Measure M. Allocation of these funds to this effort maximizes their intended use given approved funding guidelines and provisions. The source of funds will be dependent on the specific capital project funding.

### EQUITY PLATFORM

The benefits of this action are to ensure that transit infrastructure assets are maintained in a state of good repair countywide, including assets that provide transit service for disadvantaged communities. Based on the 2019 Customer Survey, the Red and Purple heavy rail lines serve the following ridership:

- 27.7% below the poverty line
- 56.4% had no car available
- Rider Ethnicity: Latino 38.9%; Black 13.1%; White 25.8%; Asian/Pacific Islander 15.2%; Other 6.5%

In addition, areas served include Union Station to Downtown LA, Koreatown (Wilshire/Western), Hollywood, Universal City, and North Hollywood, a majority of which serve people living in Equity Focus Communities.

Replacement of the fasteners will ensure that the Red and Purple Lines will operate efficiently and safely. This allows Metro to deliver safe, affordable, and dependable transit services that connect marginalized groups with jobs, housing, education, food services, family, and health care.

### IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goals:

1. Provide high-quality mobility options that enable people to spend less time traveling.
2. Deliver outstanding trip experiences for all users of the transportation system.

Replacement of the mainline fasteners will help maintain rail safety, service, and reliability standards to provide a world-class transportation system that enhances the quality of life for all who live, work, and play within Los Angeles County.

## **ALTERNATIVES CONSIDERED**

Alternatives to the project should not be considered as utilizing existing in-house workforces to replace the mainline rail fasteners is not feasible. The Track Maintenance Department presently does not have enough manpower to dedicate to the timely completion of the project work. Complete replacement of heavy rail fasteners is required to timely maintain safety requirements. Track Maintenance workforces concurrently maintain Metro's day-to-day systems and oversee the integration of expansion rail lines.

## **NEXT STEPS**

Upon approval of the recommendations, staff will increase the authorized Life of Project budget and Vendor/Contract Management will execute Contract No OP8666000.

## **ATTACHMENTS**

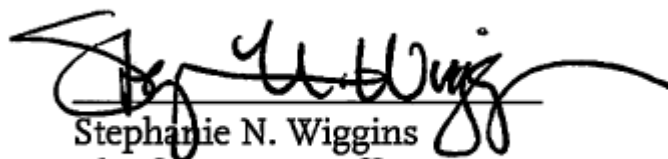
Attachment A - Procurement Summary

Attachment B - Expenditure Plan

Attachment C - DEOD Summary

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