



Board Report

File #: 2024-0970, **File Type:** Contract

Agenda Number: 26.

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
JANUARY 16, 2025**

**SUBJECT: SIEMENS P2000 LIGHT RAIL VEHICLE FRICTION BRAKE AIR COMPRESSOR
COMPONENT OVERHAUL**

ACTION: AWARD CONTRACT

RECOMMENDATION

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer to award a 48-month firm fixed-price Contract No RR119657000 to Wabtec Passenger Transit (Wabtec) for component overhaul services to the P2000 Light Rail Fleet (LRV) fleet operating on the A, C, E, and K Lines for a total not-to-exceed amount of \$10,039,572.57 subject to the resolution of any properly submitted protest(s), if any; and
- B. AWARDING a sole source procurement, pursuant to Public Utilities Code section 130237, for component overhaul services of the P2000 LRV from the Original Equipment Manufacturer (OEM) to Wabtec Passenger Transit.

(REQUIRES TWO-THIRDS VOTE OF THE FULL BOARD)

ISSUE

The P2000 LRV fleet requires friction brake overhaul at the 5-year service interval as defined by the Original Equipment Manufacturer (OEM). This ensures the vehicle braking equipment operates within design specifications according to Metro’s Corporate Safety and Operations reliability goals while meeting California Public Utilities Commission (CPUC) vehicle brake rate and stopping distance. Wabtec is the OEM of the existing friction brake system and possesses rights and control over proprietary data, supplies, and equipment necessary to ensure the full operational capability of its friction brake system. Therefore, Wabtec is the only recommended contractor for this single-source procurement. This procurement is for the overhaul services to the friction brake equipment consisting of 57 kits, including spares. This is the 4th overhaul cycle.

BACKGROUND

The P2000 LRV fleet comprises 52 LRVS with 24 years of revenue service operations and 72 million fleet miles. This fleet is currently undergoing a Component Overhaul program on coupler, gearbox, and journal bearing replacement, with completion ranging from 19% to 31%. This request is for the Board to approve the next cycle of friction brake and air compressor overhauls. Concurrently, there is an ongoing Modernization Overhaul Project on this fleet, but the tasks are separate, with no duplication between programs.

DISCUSSION

The P2000 fleet friction brake equipment overhaul is performed to ensure continued passenger safety and equipment reliability, as defined by OEM, Metro Corporate Safety, and CPUC regulations.

The friction brake and air compressor overhaul consist of several assemblies, including electrical, mechanical, and pneumatic component parts, subject to normal wear and tear during normal service operations. Routine maintenance and periodic overhauls of this equipment are critical for the vehicle operator and passengers, ensuring the LRV will stop in regular service modes as well as in emergency braking applications.

Metro's Transit Vehicle Engineering (TVE) developed the overhaul statement of work and technical specification(s) for all systems based on OEM recommendations and Rail Fleet Services maintenance experience. The contractor will overhaul and test the friction brake systems in accordance with maintenance manuals within the defined schedule requirements.

DETERMINATION OF SAFETY IMPACT

Safety is of the utmost importance for Metro and its passengers. Therefore, maintaining the P2000 LRV fleet without deferred maintenance is necessary while meeting Transit Asset Management Federal guidelines on equipment State of Good Repair (SGR). The friction brake equipment is a vital system that provides the means to stop the vehicle during in-service operations and during emergency braking modes.

FINANCIAL IMPACT

Funding of \$10,039,572.57 for this contract is included within the Life of Project (LOP) budget under approved Capital Project (CP) 214005 - P2000 Fleet Component Overhaul.

Since this is a multi-year project, the cost center Component Overhaul Superintendent, Division Director, and Sr. Executive Officer of Rail Fleet Services will ensure that funds are budgeted in future years.

Impact to Budget

The current source of funds for this action is Measure R, which is eligible for bus and rail operations.

EQUITY PLATFORM

This action will ensure that Metro's P2000 LRV fleet is able to provide vital transportation services throughout LA County via A, C, E, and K Lines, including many Equity Focus Communities (EFC) where disparities within the region can exist between residents' access to jobs, housing, education, health, and safety. The P2000 LRV fleet operates on all light rail lines directly impacting EFCs, such as neighborhoods in East and South Los Angeles, Long Beach, Compton, Watts, Crenshaw, and Inglewood, among others. Rail transportation provides an essential lifeline for travelers with limited transportation options, and the Metro light rail maintenance program ensures the proper SGR to the P2000 LRV fleet for those primarily relying on transit.

In addition to Wabtec being the OEM, federally funded procurements are not applicable to Local Small Business Enterprise preference. Federal law (49 CFR § 661.21) prohibits the use of local procurement preferences on FTA-funded projects.

Wabtec committed 3% Disadvantaged Business Enterprise for this OEM contract.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of the P2000 LRV fleet friction brake and air compressor overhaul supports Strategic Goal 1: Provide high-quality mobility options that enable people to spend less time traveling. RFS staff will perform this overhaul in conjunction with ongoing coupler and gearbox overhauls, ensuring sustained fleet reliability and safe, accessible, and affordable transportation for Metro's light rail system riders.

The recommendation supports Metro's Strategic Plan Goal 5) Provide Responsive, Accountable, and Trustworthy governance within the Metro organization. Contract Modification Authority and Contract extension safeguard overhaul production continuance while reliably meeting passenger safety and fleet needs.

ALTERNATIVES CONSIDERED

The P2000 LRV fleet has recently undergone a Modernization Overhaul Program that addressed major equipment obsolescence e.g., propulsion and friction brake controls, and new Heating, Ventilation, and Air Conditioning equipment utilizing current technology and part upgrades. Rail Fleet Services staff are responsible for the removal and installation of the friction brake equipment whereas the Contractor performs the equipment overhaul that requires specialized training, tooling, and pneumatic test bench equipment. With this historical approach the Contractor assumes performance reliability safety sensitive equipment. An alternative is to defer the OEM recommended overhaul program; however, this is not recommended as the fleet will suffer over time and will create decreased availability/reliability with a high risk of equipment breakdown as well as negative impacts on on-time performance and customer service.

NEXT STEPS

Upon Board approval, the friction brake system overhaul will commence according to stakeholders' mutually agreed production schedules.

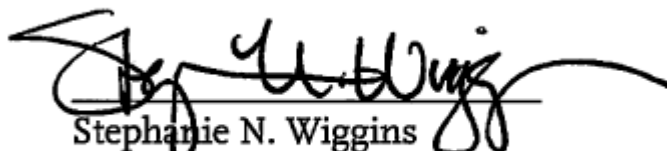
ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

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Reviewed by: Conan Cheung, Chief Operations Officer (213) 418-3034



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

SIEMENS P2000 LIGHT RAIL VEHICLE FRICTION BRAKE AIR COMPRESSOR COMPONENT OVERHAUL

1.	Contract Number: RR119657000	
2.	Recommended Vendor: Wabtec Passenger Transit, A Division of Wabtec Corp.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input checked="" type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: 01-02-2024	
	B. Advertised/Publicized: N/A	
	C. Pre-Proposal Conference: N/A	
	D. Proposals Due: 06-07-2024	
	E. Pre-Qualification Completed: 02-20-2024	
	F. Ethics Declaration Forms submitted to Ethics: 02-14-2024	
	G. Protest Period End Date: 01-22-2025	
5.	Solicitations Picked up/Downloaded: 1	Bids/Proposals Received: 1
6.	Contract Administrator: Jessica Omohundro	Telephone Number: (213) 922-4790
7.	Project Manager: Richard Lozano	Telephone Number: (323) 224-4042

A. Procurement Background

This Board Action is to approve the award of Contract No. RR119657000 to transport, inspect, overhaul, and test fifty-seven (57) P2000 friction brake and air compressor overhaul kits in support of Metro's P2000 Light Rail Vehicle (LRV) subject to the resolution of any properly submitted protest(s), if any. The existing friction brake system on the P2000 rail cars was designed and built by Wabtec Passenger Transit, the original equipment manufacturer (OEM). It was determined by Metro's engineering and operations team that Wabtec Passenger Transit possesses rights and control over proprietary data, supplies, and equipment necessary to ensure full operational capability of their friction brake system. Therefore, the overhaul of the P2000 friction brakes must be overhauled by the original equipment manufacturer (OEM), Wabtec Passenger Transit. Wabtec made a 3% Disadvantaged Business Enterprise (DBE) commitment for this OEM contract.

The non-competitive Request for Proposal (RFP) was issued on January 2, 2024, in accordance with Metro's Acquisition Policy and the contract type is a Firm-Fixed-Price.

Two (2) amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on January 18, 2024, revised critical dates, and extended the proposal due date.
- Amendment No. 2, issued on May 17, 2024, requested Best and Final Offer (BAFO) on their Good Faith Efforts for DEOD to review.
- Best and Final Offer (BAFO) issued on November 13, 2024.

B. Evaluation of Proposal

This non-competitive procurement is consistent with Public Utility Code § 130237 for the duplication or replacement of existing equipment already in use. The proposal was evaluated in compliance with Metro's Acquisition Policy and Procedures.

A Proposal Evaluation Team (PET) consisting of Metro staff from Transit Vehicle Engineering and Rail Fleet Services performed a comprehensive technical evaluation. The technical evaluation consisted of reviews of the Proposer's key personnel, project management, quality assurance and work plans. The proposal was found to be technically acceptable and in compliance with the requirements of the RFP.

C. Cost Analysis

In accordance with Metro's Acquisition Policy and Procedures for a non-competitive acquisition, a cost analysis is required. The recommended proposal price has been determined to be fair and reasonable based upon a cost analysis, technical evaluation, Independent Cost Estimate (ICE), discussions and negotiations.

Proposer Name	Proposal Amount	Metro ICE	Negotiated Amount
Wabtec Passenger Transit	\$10,306,797.57	\$6,298,500.00	\$10,039,572.57

The Contract Administrator led discussions with Wabtec to address questions and get clarification on their proposed work plan, scope of work, level of effort, and proposed price. Following these discussions, Wabtec made price and technical adjustments and submitted a Best and Final Offer (BAFO) which included a reduced proposal price in the amount of \$10,039,572.57.

The negotiated BAFO price represents a 2.6% reduction from the initial proposed amount, however, it is still 59.4% higher than the ICE. This difference is attributed to several key factors that were not fully considered in the ICE. The contributing factors that make up most of the difference are:

1. System obsolescence – Wabtec included additional engineering costs required to upgrade and retrofit current updated component technology to the existing obsolete system. The ICE did not include these brake control subsystem component upgrades which are significant and account for approximately 37.9% of the overall difference.
2. Risk Contingency – Metro's overhaul specification is intended to cover all items found to be worn, damaged, defective, or otherwise requiring replacement. The primary driver of the increased costs is the expanded scope of work. Previous contract was limited to specific overhaul tasks. The enhanced scope brings additional responsibilities, requiring increased resource allocation, labor, and

material costs. This, along with the high level of component obsolescence, creates financial risk that the ICE did not account for. This risk contingency factor accounts for approximately 3.4% of the overall difference.

Factoring these elements into the analysis, the difference between the ICE and the negotiated amount is reconciled to approximately 18.1% which is the best attainable, fair and reasonable price.

D. Background on Recommended Contractor

The recommended firm, Wabtec Passenger Transit, a division of Wabtec Corp, is a leading global provider of equipment, systems, digital solutions, and value-added services for the freight and transit rail sectors. With over 150 years of experience, they are leading the way in safety, efficiency, reliability, innovation, and productivity in over 50 countries around the world.

DEOD SUMMARY

SIEMENS P2000 LIGHT RAIL VEHICLE FRICTION BRAKE AIR COMPRESSOR
COMPONENT OVERHAUL**A. Small Business Participation**

Wabtec Passenger Transit made a 3% Disadvantaged Business Enterprise (DBE) commitment for this non-competitive Original Equipment Manufacturer (OEM) solicitation, which is the commitment of record that will be monitored through the life of the contract.

Small Business Commitment	3% DBE
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	DBE Subcontractors	Ethnicity	% Committed
1.	Mai's Supply and Service	Asian Pacific American	2.45%
2.	Celestial Freight Solutions	Hispanic American	0.55%
Total Commitment			3.00%

B. Local Small Business Enterprise (LSBE) Preference

The LSBE preference is not applicable to federally funded procurements. Federal law (49 CFR § 661.21) prohibits the use of local procurement preferences on FTA-funded projects.

C. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

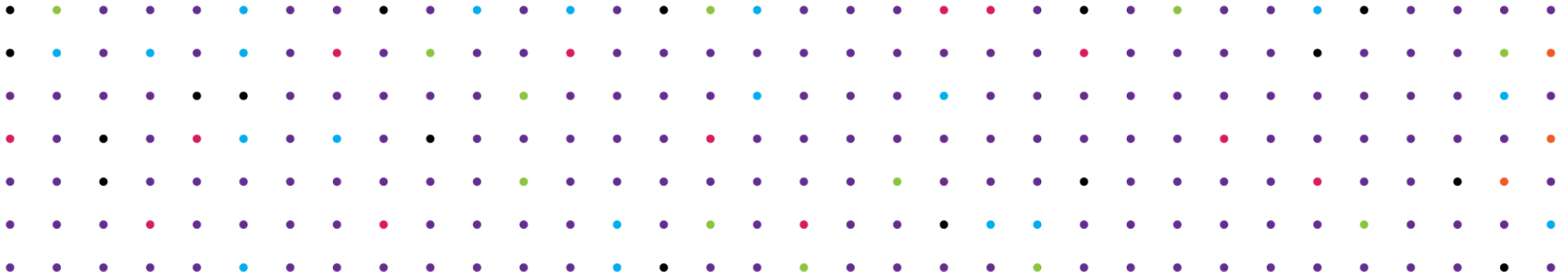
D. Prevailing Wage Applicability

Prevailing wage is not applicable to this contract.

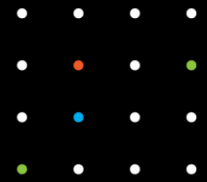
E. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

P2000 Light Rail Vehicle Friction Brake Air Compressor Component Overhaul



RECOMMENDATION

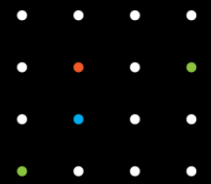


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ISSUE & DISCUSSION



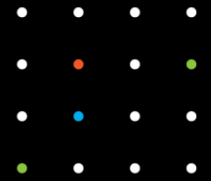
ISSUE

The P2000 Light Rail fleet consists of 52 vehicles requiring friction brake overhaul every 5 years as defined by the original friction brake manufacturer. This is the 5th overhaul cycle for this equipment by the OEM safeguarding passenger safety to the original manufacturer's design criteria, and vehicle reliability ensuring the P2000 fleet remains in a continuous State of Good Repair.

DISCUSSION

This procurement is for the overhaul of the friction brake equipment replacing worn and expired parts as well as including comprehensive testing thereby ensuring the friction brake system operates in all service modes including emergency braking applications. The friction brakes are a safety critical system.

CONTRACT AWARD



AWARDEE

Wabtec Passenger Transit (Wabtec)

NUMBER OF BIDS

1 (Sole Source)

DEOD COMMITMENT

3% DBE

