Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

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

SUBJECT: P2000 AND P3010 LIGHT RAIL VEHICLE PANTOGRAPH OVERHAUL

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a sixty (60) month, firm fixed price contract, Contract No. OP128650000, to Wabtec Passenger Transit for the P2000 and P3010 Light Rail Vehicle (LRV) Pantograph Overhaul, in the total Not-To-Exceed (NTE) amount of $6,732,338.00, subject to the resolution of any properly submitted protest(s), if any.

ISSUE

The Original Equipment Manufacturer (OEM), Trans-Tech, identified and established an equipment overhaul schedule for the pantograph assembly at the 600,000-mile interval for Metro's P2000 and P3010 Light Rail Fleet. This overhaul is not routine maintenance, but a complete teardown, inspection, and replacement of worn parts with new ones. The pantograph assembly provides 750 volts direct current (vdc) to the LRV via the Overhead Catenary System (OCS), providing the power to the propulsion and auxiliary equipment necessary for vehicle operations.

Overhauling the pantograph assembly at this interval minimizes equipment failures while maintaining the fleet in a constant state of good repair.

BACKGROUND

This procurement is applicable to both the P2000 and P3010 LRV fleets that utilize the same pantograph manufactured by Trans-Tech.

The P2000 LRV is manufactured by Siemens Transportation Systems, consisting of 52 LRVs placed in revenue service between July 2000 and June 2022 with a cumulative fleet mileage of 71,126,334 miles. With more years in service, the P2000 fleet has had their pantographs replaced over time. As these cars near their next pantograph overhaul milestone, Rail Fleet Services has initiated a joint procurement with the P3010 fleet, which are reaching their pantograph overhaul timeframe with cars ranging between 400,000 and 600,000 miles.

The P3010 LRV fleet is manufactured by Kinkisharyo International, LLC, and consists of 235 vehicles

in total. The P3010 fleet was placed in service between 2016-2023, and operates on all of Metro's light rail lines, including the recently opened Regional Connector.

The P3010 fleet is Metro's newest and most reliable light rail fleet, with consistent performance, reliability, and safety at over 104,568,921 fleet miles. To maintain its reliability and safety, component -level overhauls are required on its key systems.

The P2000 and P3010 fleet car builders and OEM identified and established a component overhaul plan/schedule for the overhaul of key vehicle systems occurring at the 600,000-mile interval. The pantograph assembly provides power from the OCS to the LRV by conducting electricity through carbon assemblies on the collector head and ultimately through the power take-off plate(s) onto the base frame. The pantograph is electrically isolated from the car rooftop by insulators and is lowered or raised by an electric actuator.

The P2000 and P3010 light rail car fleet manufacturers, Siemens and Kinkisharyo, respectively, along with their sub-suppliers, identified component-level overhauls to key vehicle systems, such as the friction brake, coupler, and truck assembly (including traction motor and gearbox). These projects are underway now, awaiting the pantograph assembly overhaul.

DISCUSSION

Both the P2000 and P3010 Fleet Component Overhaul projects consist primarily of the repair and replacement of vehicle wear items that require overhaul or replacement of the vehicles' 30-year design life with targeted mileage intervals of 600,000 miles. Rail Fleet Services (RFS) staff will perform the removal, installation, and testing of the overhauled or new equipment.

Metro's Transit Vehicle Engineering (TVE) Department, along with RFS staff, performed a technical review of the OEM component overhaul tasks and are in concurrence with the scope of work and overhaul schedule as described in the Heavy Repair Maintenance Manual. TVE developed the Statement of Work for this project, ensuring the Contractors followed Federal Transit Administration (FTA), Association of American Railroads (AAR), California Public Utilities Commission (CPUC), and Metro's Corporate Safety Standards.

The railcar manufacturer recommends an overhaul of the pantograph assembly at the 600,000-mile interval for replacement of wear items, including mechanical components, carbon strips, shunts, auto -drop device, heavy-duty springs, insulators, and actuating motors.

DETERMINATION OF SAFETY IMPACT

Passenger safety is of the utmost importance to Metro. The pantograph assembly is an integral component of the LRV operation as the electrical interface between the OCS and LRV required for safe and reliable operations. Timely replacement of worn components will ensure that safety is preserved by overhauling the pantograph assemblies into new condition as identified by the OEM, while achieving regulatory compliance within state and federal regulations, including Metro's corporate safety standards.

FINANCIAL IMPACT

Funding in the amount of $1,000,000 for the pantograph assembly overhaul is included in the FY26 budget under approved Capital Projects (CP) 214005 - P2000 Vehicle Component Replacement and CP 214009 - P3010 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 the balance of funds is budgeted in future years.

Impact to Budget

The current source of funds for this action is Measure M State of Good Repair 2%. This funding is eligible for Capital Projects. Given approved funding provisions and guidelines, using these funding sources maximizes project funding intent.

EQUITY PLATFORM

Metro's P3010 LRV fleet provides vital transportation services throughout the City and County of Los Angeles via the A, C, E, and L lines, while the P2000 LRV fleet currently operates on the A line only. This includes many underserved communities where regional disparities exist between residents' access to jobs, housing, education, health, and safety. Metro's light rail vehicle maintenance programs maintain the fleet's operations within federally mandated State of Good Repair standards, ensuring reliable service, especially for those within the communities that rely on public transportation.

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Small Business Enterprise/Disabled Veteran Business Enterprise (SBE/DVBE) goal due to the lack of certified small businesses that perform this service.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles County are lower than national averages, the lowest in the SCAG region, and on the lower end of VMT per capita statewide, with these declining VMT trends due in part to Metro's significant investment in rail and bus transit.* Metro's Board-adopted VMT reduction targets align with California statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro's systemwide strategy to reduce VMT through rail vehicle equipment purchase activities that will ensure the safety and reliability of Metro rail lines, further encouraging transit ridership, ridesharing, and active transportation. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS)

data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of the P2000 and P3010 LRV pantograph assembly overhaul supports Strategic Goal 1: Provide high-quality mobility options that enable people to spend less time traveling. This component -level overall project ensures sustained fleet reliability, including safe, accessible, and affordable transportation for all riders of Metro's light rail system. The recommendation supports Metro's Strategic Plan Goal 5) Provide Responsive, Accountable, and Trustworthy governance within Metro's organization. Contract Modification Authority and Contract extension safeguard overhaul production continuance while meeting passenger safety and fleet reliability.

ALTERNATIVES CONSIDERED

An alternative is to defer the pantograph assembly overhaul. However, this alternative is not recommended as the pantograph is a vital component that could result in equipment failure, service delays, and significant damage to the OCS if not performed.

NEXT STEPS

Upon approval by the Board, staff will execute Contract No. OP128650000 for P2000 and P3010 light rail vehicle pantograph overhaul assembly with Wabtec Passenger Transit.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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PROCUREMENT SUMMARY

P2000 AND P3010 LIGHT RAIL VEHICLE PANTOGRAPH OVERHAUL / OP128650000

1.	**Contract Numbers**: **OP128650000**	
2.	**Recommended Vendors**: Wabtec Passenger Transit, a division of Wabtec Corporation	
3.	**Type of Procurement (check one):** ☐ **IFB** ☒ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: April 1, 2025	
	B. Advertised/Publicized: April 1, 2025	
	C. Pre-Proposal Conference: April 7, 2025	
	D. Proposals Due: May 12, 2025	
	E. Pre-Qualification Completed: June 20, 2025	
	F. Ethics Declaration Forms submitted to Ethics: May 20, 2025	
	G. Protest Period End Date: October 21, 2025	
5.	**Solicitations Downloaded**: 15	**Proposals Received**: 1
6.	**Contract Administrator**: Andrew Coppolo	**Telephone Number**: (213) 922 1067
7.	**Project Manager**: Richard Lozano	**Telephone Number**: (213) 792 8047

A. Procurement Background

This Board Action is to approve Contract No. OP128650000 to transport, inspect, overhaul, and test fifty-seven (57) P2000 pantograph kits and two-hundred fifty-nine (259) P3010 pantograph kits in support of Metro's P2000 and P3010 Light Rail Vehicles (LRVs). Board approval of the contract award is subject to the resolution of any properly submitted protest(s), if any.

Request for Proposal (RFP) No. OP128650 was issued in accordance with Metro's Acquisition Policy and the contract type is a firm-fixed price. The Diversity & Economic Opportunity Department (DEOD) did not recommend a goal for this project.

One (1) amendment was issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on April 8, 2025, clarified the project schedule in Exhibit A - Scope of Services (SOS).

A total of fifteen (15) firms downloaded the RFP and were included in the planholders' list. A virtual pre-proposal conference was held on April 7, 2025, and was attended by two (2) participants representing two (2) firms. There were seven (7) questions received for this RFP and responses were provided prior to the proposal due date.

A total of one (1) proposal was received on May 12, 2025, from the following firm:

1. Wabtec Passenger Transit (Wabtec)

Staff conducted a market survey to request information from prospective proposers to determine why no additional proposals were submitted. Inquiries were made of all firms that downloaded the solicitation. Two firms responded that the scope of services was not aligned with their line of work and one firm responded that they did not download the RFP in time. The results of the market survey indicated that factors beyond LACMTA's control caused the potential sources not to submit proposals and that there were no restrictive elements in the solicitation documents that prevented competition.

B. Evaluation of Proposals

A diverse Proposal Evaluation Team (PET) consisting of experienced staff from LACMTA Transit Vehicle Engineering (TVE), Rail Fleet Services (RFS), and Rail Vehicle Engineering was convened and conducted a comprehensive technical evaluation of the proposal received.

The proposals were initially evaluated based on the pass/fail criteria minimum qualifications criteria outlined in the RFP. The pass/fail requirements required proposers demonstrate that they have, hold, and provide a copy of at least one of the following certifications: Association of American Railroads (AAR) Certification of Quality Assurance Program; International Standards Organization (ISO) 9001 Quality Management System; or International Railway Industry Standards (IRIS).

The PET determined the single proposal received passed the minimum qualification requirements and were further evaluated based on the following weighted evaluation criteria:

• Proposer (Including Subcontractor(s)) Experience and Past Performance	30%
• Project Manager and Key Staff Qualifications	30%
• Work Plan/Project Approach	25%
• Cost Proposal	15%

The evaluation criteria are appropriate and consistent with criteria developed for other, similar light rail vehicle overhaul procurement projects. Several factors were considered when developing these weights, giving the greatest importance to Proposer Experience and Past Performance and Project Manager and Key Staff's Qualifications requirements.

On May 20, 2025, the PET met to review the evaluation criteria package, process confidentiality and conflict of interest forms and take receipt of the proposal to initiate the evaluation phase. Evaluations were conducted from May 20, 2025, through June 16, 2025.

On June 16, 2025, the PET reconvened and determined that Wabtec was responsive to the requirements of the RFP and recommended the firm for contract award.

Qualifications Summary of Qualified Firms:

Wabtec

Wabtec is a leading provider of rail technology and services with extensive experience supporting transit agencies across North America. With over a century of industry experience, Wabtec specializes in the overhaul and maintenance of critical rail systems, including braking systems, pantographs, and propulsion equipment. As an Original Equipment Manufacturer (OEM) and authorized service provider for multiple transit fleets, including Metro's P2000 and P3010 light rail cars, Wabtec offers robust in-house capabilities for engineering, testing, remanufacturing, and quality assurance. Their U.S. based facilities, local based facility, and strong supply chain infrastructure ensure timely delivery, technical accuracy, and lifecycle support which makes Wabtec a well-qualified firm to perform the P2000 and P3010 Light Rail Vehicle Pantograph Overhaul.

The following is a summary of the PET evaluation:

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	**Wabtec**				
3	Proposer (Including Subcontractor(s)) Experience and Past Performance	77.77	30.00%	23.33	
4	Project Manager and Key Staff's Qualifications and Experience	78.90	30.00%	23.67	
5	Work Plan/Project Approach	75.00	25.00%	18.75	
6	Cost Proposal	100.00	15.00%	15.00	
7	**Total**		**100.00%**	**80.75**	**1**

C. Cost Analysis

The recommended price has been determined to be fair and reasonable based upon an Independent Cost Estimate (ICE), cost analysis, technical evaluation, and negotiations.

	Proposer Name	Proposal Amount	Metro ICE	Negotiated or NTE Amount
1.	Wabtec Passenger Transit	$6,790,400.00	$6,720,000.00	$6,732,338.00

The Contract Administrator led discussions with Wabtec to address questions and receive clarification of their proposed work plan, scope of services, level of effort, travel, and other direct costs (ODCs) within their Proposal. Following these discussions, Wabtec made price adjustments and submitted a revised Best and Final Offer (BAFO) which included a reduced proposal price in the amount of $6,732,388.00.

The negotiated BAFO price represents a 0.86% reduction from the initial proposed amount and is 0.18% higher than Metro's ICE, which is determined to be within a reasonable range. Based on historical government pricing, Wabtec's revised BAFO is considered fair and reasonable.

D. Background on Recommended Contractor

Wabtec, headquartered in Spartanburg, South Carolina, is a division of Wabtec Corporation (Wabtec) that specializes in designing and manufacturing equipment, electronics, mechanical components, systems, digital solutions, and value-added services for passenger rail transit systems worldwide. Their transit services organization offers comprehensive lifecycle support, including light and heavy overhaul of rolling stock and components across global transit fleets. 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. Wabtec's Project Manager has over 16 years of project management experience. Wabtec has provided services for LACMTA, and performance has been satisfactory.

DEOD SUMMARY

P2000 AND P3010 LIGHT RAIL VEHICLE PANTOGRAPH OVERHAUL / OP128650000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Small Business Enterprise (SBE)/Disabled Veteran Business Enterprise (DVBE) participation goal for this procurement due to the lack of certified small businesses that perform this service. Wabtec Passenger Transit will perform the work with its own workforce.

B. Living Wage and Service Contract Worker Retention Policy Applicability

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

C. Prevailing Wage Applicability

Prevailing wage is not applicable to this contract.

D. 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.

E. Manufacturing Careers Policy

The Manufacturing Careers Policy (MCP) does **not apply** to this contract. The MCP is required on Metro's Rolling Stock RFPs, with an Independent Cost Estimate of at least $50 million.

P2000 AND P3010 RAIL VEHICLE PANTOGRAPH OVERHAUL

OCTOBER 16, 2025

Metro

Operations, Safety, & Customer Experience Committee Meeting

RECOMMENDATION

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Metro

ISSUE & DISCUSSION

AWARDEE

Wabtec Passenger Transport

NUMBER OF BIDS/PROPOSALS

	Proposer Name	BAFO Proposal
1	Wabtec Passenger Transport	$6,732,338.00

DEOD COMMITMENT

The Diversity and Economic Opportunity Department (DEOD) does not recommend a Small Business Enterprise (SBE) or a Disabled Veteran Business Enterprise (DVBE) participation goal for this procurement due to the lack of subcontracting opportunities.

Metro

ISSUE & DISCUSSION (cont.)

ISSUE

The Original Equipment Manufacturer (OEM), identified and established and equipment overhaul schedule for the pantograph assembly at the 600,000-mile interval to ensure equipment reliability and passenger safety.

DISCUSSION

The pantograph assembly provides 750 volts direct current (VDC) to the LRV electrical systems via the overhead catenary system (OCS) providing power to the propulsion and auxiliary equipment necessary for vehicle operations. Overhauling the pantograph at the recommended interval minimize equipment in-service failures while maintaining the fleets in a constant state of good repair.

Metro