Metro

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

Agenda - Final

Thursday, September 20, 2018

9:00 AM

One Gateway Plaza, Los Angeles, CA 90012,
3rd Floor, Metro Board Room

Operations, Safety, and Customer Experience Committee

Mike Bonin, Chair
Hilda Solis, Vice Chair
Jacquelyn Dupont-Walker
John Fasana
Robert Garcia
Shirley Choate, non-voting member

Phillip A. Washington, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES
(ALSO APPLIES TO BOARD COMMITTEES)

PUBLIC INPUT

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

CONDUCT IN THE BOARD ROOM - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

REMOVAL FROM THE BOARD ROOM The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
d. Any other unlawful interference with the due and orderly course of said meeting.

INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded on CD's and as MP3's and can be made available for a nominal charge.

DISCLOSURE OF CONTRIBUTIONS

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than $250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars ($10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

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NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

CALL TO ORDER

ROLL CALL

APPROVE Consent Calendar Item(s): 18, 19, 20

Consent Calendar items are approved with one motion unless held by a Director for discussion and/or separate action.

CONSENT CALENDAR

18. SUBJECT: BUS ENGINE CYLINDER HEAD ASSEMBLIES 2018-0484

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a two year, Indefinite Delivery, Indefinite Quantity Contract No. MA49128000 to Cummins Inc., for bus engine cylinder head assemblies. The Contract first year base amount is $834,968, inclusive of sales tax, and the second year Contract amount is $855,843, inclusive of sales tax, for a total contract value of $1,690,811.

Attachments: Attachment A - Procurement Summary

Attachment B - DEOD Summary

19. SUBJECT: BUS ENGINE IGNITION COILS 2018-0496

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a two year, Indefinite Delivery, Indefinite Quantity Contract No. MA48849-2000 to Cummins Inc. for bus engine ignition coils with a first year base contract amount of $678,129, inclusive of sales tax, and a second year contract amount of $695,106, inclusive of sales tax, for a total contract value of $1,373,235, subject to resolution of protest(s), if any.

Attachments: Attachment A - Procurement Summary

Attachment B - DEOD Summary

20. SUBJECT: A650 STATIC CONVERTER LOW VOLTAGE POWER SUPPLY (LVPS) ASSEMBLY (OPTION-BUY FLEET) 2018-0503

RECOMMENDATION

AWARD a 60-month indefinite quantity/indefinite delivery Contract No. MA48386000 to Knorr-Bremse PowerTech to overhaul up to 42 Static Converter LVPS Assemblies for the A650 Option Rail Vehicle for a not-to-exceed amount of $1,308,394, subject to resolution of protest(s), if any.

Attachments: Attachment A - Procurement Summary
Attachment B - DEOD Summary

NON-CONSENT

21. SUBJECT: OPERATIONS EMPLOYEE OF THE MONTH 2018-0505

RECOMMENDATION

Operations Employee of the Month

Attachments: Presentation

22. SUBJECT: MONTHLY UPDATE ON TRANSIT POLICING PERFORMANCE 2018-0507

RECOMMENDATION

RECEIVE AND FILE Monthly Update on Transit Policing Performance.

Attachments: Attachment A- System-Wide Law Enforcement Overview July 2018
Attachment B - Detail by Rail Line July 2018
Attachment C- Key Performance Indicators July
Attachment D - Transit Policing Summary July 2018

23. SUBJECT: BUS SAFETY TECHNOLOGY DEMONSTRATION 2018-0046

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a sole source Contract No. PS111340000 to New Flyer of America Inc. in the amount of $1,191,500 to furnish and install a collision avoidance and mitigation technology system on forty (40) Metro transit buses.

Attachments: Attachment A - Procurement Summary
Attachment B - Statement of Work
Attachment C - DEOD Summary

24. SUBJECT: DOOR ENABLE SYSTEM (CORRECT SIDE DOOR OPENING PROJECT) 2018-0483

RECOMMENDATION

CONSIDER:

A. FINDING that awarding a design-build contract pursuant to Public Utilities Code Section 130242(b) will achieve for Metro certain private sector efficiencies through the integration of design, project work and components at Metro rail facilities and in Metro light rail vehicles in Los Angeles County as defined by the project listed in Attachment A. Approval requires a two-thirds affirmative vote;

B. ADOPTING the use of the design-build process pursuant to Public Utilities Code Section 130242 et seq. will result in a reduction in project costs and expedite project completion. Approval requires a two-thirds affirmative vote; and

C. AUTHORIZING the Chief Executive Officer to solicit a design-build contract for design and construction of the project listed in Attachment A pursuant to Public Utilities Code Section 130242 (a), (c), (d) and (e).

Attachments: Attachment A – Correct Side Door Opening Project Scope of Work

25. SUBJECT: A650-2015, HEAVY RAIL VEHICLE OVERHAUL AND CRITICAL COMPONENT REPLACEMENT PROGRAM 2018-0486

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute Contract Modification No. 2 to Contract No. A650-2015, with Talgo Inc. for the Heavy Rail Vehicle Overhaul and Critical Component Replacement Program (OCCRP), for the design and installation of an on-board Mist Fire Suppression System (MFSS) on 74 A650 Heavy Rail Vehicles (HRV) in the firm-fixed price amount of $10,355,000 for a total contract value not-to-exceed $83,325,494. The inclusion of the MFSS into the OCCRP will extend the period of performance by eight months.

Attachments: Attachment A - Procurement Summary

Attachment B - Contract Modification Log

Attachment C - Funding and Expenditure Plan

Attachment D - DEOD Summary

26. SUBJECT: P3010, LIGHT RAIL VEHICLE PROCUREMENT CONTRACT 2018-0489

RECOMMENDATION

APRROVE Modification No. 36 to Contract No. P3010 with Kinkisharyo International LLC to reduce the existing 100% performance bond requirements for Contract deliverables to realize a project savings of $4,386,957, decreasing the total Contract value from $926,142,679 to $921,755,722. The Contract decrease does not affect the Life of Project Budget.

Attachments: Attachment A - Procurement Summary
Attachment B - Contract Modification Authority Summary
Attachment C - DEOD Summary

27. SUBJECT: MEMBERSHIP ON METRO SERVICE COUNCILS 2018-0495

RECOMMENDATION

APPROVE nominee for membership on Metro's Service Councils (Attachment A).

Attachments: Attachment A – New Nominee Listing of Qualifications
Attachment B – Nomination Letters

28. SUBJECT: RAIL EMERGENCY RESPONSE UNIT CONTRACT 2018-0497

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a firm fixed price Contract No. OP51822000 with Brandt Group, Road Rail Division, the lowest responsive and responsible bidder, for one (1) Rail Emergency Response Unit in the amount of $1,429,680 inclusive of sales tax, subject to resolution of protest(s), if any.

Attachments: Attachment A - Procurement Summary
Attachment B - DEOD Summary

29. SUBJECT: A650 TRACTION GEAR UNIT OVERHAUL (OPTION-BUY FLEET) 2018-0504

RECOMMENDATION

AWARD a 74-month indefinite delivery/indefinite quantity Contract No. MA47351000 for the overhaul of up to 296 traction gear units for 74 Breda A650 Option Rail Vehicles to ORX, for a not-to-exceed amount of $4,925,746, subject to resolution of protest, if any.

Attachments: Attachment A - Procurement Summary

Attachment B - DEOD Summary

30. SUBJECT: ORAL REPORT ON CRENSHAW/GREEN LINE OPERATING PLAN 2018-0506

RECOMMENDATION

RECEIVE oral report on Crenshaw/Green Line Operation Plan Motion 40.1 Update.

Attachments: Presentation

31. SUBJECT: COPY CENTER EQUIPMENT AND SERVICES 2018-0523

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a five-year Contract No. PS110638000 to Canon Solutions America Inc. for Copy Center and Design Studio equipment and services in an amount not-to-exceed $1,590,568, inclusive of sales taxes; subject to the resolution of protest(s), if any.

Attachments: Attachment A - Procurement Summary

Attachment B - DEOD Summary

SUBJECT: GENERAL PUBLIC COMMENT 2018-0604

RECEIVE General Public Comment

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

COMMENTS FROM THE PUBLIC ON ITEMS OF PUBLIC INTEREST WITHIN COMMITTEE'S SUBJECT MATTER JURISDICTION

Adjournment

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

Metro

Board Report

File #: 2018-0484, **File Type:** Contract **Agenda Number:** 18.

OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: BUS ENGINE CYLINDER HEAD ASSEMBLIES

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a two year, Indefinite Delivery, Indefinite Quantity Contract No. MA49128000 to Cummins Inc., for bus engine cylinder head assemblies. The Contract first year base amount is $834,968, inclusive of sales tax, and the second year Contract amount is $855,843, inclusive of sales tax, for a total contract value of $1,690,811.

ISSUE

This procurement is for the acquisition of new bus engine cylinder head assemblies which are required for maintaining the safe and reliable operation of the bus fleet. Award of this Contract will ensure that Bus Maintenance has adequate inventory to repair and maintain buses according to Metro maintenance standards.

BACKGROUND

The component usage reports from Material Management revealed that approximately 250 engine cylinder head assemblies were issued to Bus Maintenance to support replacement of these components during engine rebuild programs or for replacement of cylinder heads that crack, warp, or sustain other damage during normal operation. The engine cylinder head assemblies are installed by Metro Mechanics at the Central Maintenance Shops and at all bus operating divisions. Buses cannot operate without properly functioning engine cylinder head assemblies.

DISCUSSION

A cylinder head assembly is a precisely engineered block of metal that sits on top of the engine and houses many of the engine's moving parts, including the intake and exhaust valves, valve springs and lifters, and the spark plugs. Cylinder heads that crack, warp, or sustain other damage need to be replaced. The cylinder head assemblies support over 90% of our bus fleet which have Cummins 8.9 ISLG and L9N Near-Zero engines installed.

The contract to be awarded is a “requirements type” agreement in which Metro commits to order only from the awardee, up to the specified quantity for a specific duration of time, but there is no obligation or commitment for Metro to order all of the cylinder heads that may be currently anticipated. The bid quantities are estimates only, with deliveries to be ordered and released as required. The Diversity and Economic Opportunity Department (DEOD) did not establish a Small Business Enterprise (SBE) goal for this solicitation due to the lack of subcontracting opportunities. The purchased engine cylinder head assemblies are installed by Metro Mechanics.

Bus engine cylinder head assemblies will be purchased and maintained in inventory and managed by Material Management. As cylinder head assemblies are issued, the appropriate budget project numbers and accounts will be charged.

DETERMINATION OF SAFETY IMPACT

Award of contract will ensure that all operating divisions and the Central Maintenance Facility have an adequate inventory to maintain the equipment according to Metro Maintenance standards.

FINANCIAL IMPACT

The funding of $834,968 for these cylinder head assemblies is included in the FY19 budget under account 50441, Parts - Revenue Vehicle in multiple bus operating division cost centers in project 306002 and in the Central Maintenance cost center 3366 in project 203025 Bus Engine Replacement Project.

Since this is a multi-year contract, the cost center manager and Chief Operations Officer will be accountable for budgeting the cost in future fiscal years including any option exercised.

Impact to Budget

The current source of funds for this action will come from Federal and local funds including sales tax and fares that are eligible for Bus and Rail Operating and Capital Projects. These funding sources maximize allowable fund use given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Deliver outstanding trip experiences for all users of the transportation system. This project will help maintain safety and reliability standards 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 alternative is to not award the Contract and procure cylinder head assemblies on the open market on an as-needed basis. This approach is not recommended since it does not provide a commitment from the supplier to ensure availability and price stability.

NEXT STEPS

Metro's requirements for bus engine cylinder head assemblies will be fulfilled under the provisions of the Contract.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: James D. Pachan, Superintendent of Maintenance, (213) 922-5804

Reviewed by: Debra Avila, Chief, Vendor/Contract Management (213) 922-6383
James T. Gallagher, Chief Operations Officer (213) 418-3108

Phillip A. Washington
Chief Executive Officer

ATTACHMENT A

PROCUREMENT SUMMARY

BUS ENGINE CYLINDER HEAD ASSEMBLIES/MA49128000

1.	**Contract Number**: MA49128000	
2.	**Recommended Vendor**: Cummins Inc.	
3.	**Type of Procurement (check one):** ☒ **IFB** ☐ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: 5/1/18	
	B. Advertised/Publicized: 5/1/18	
	C. Pre-proposal/Pre-Bid Conference: N/A	
	D. Proposals/Bids Due: 5/30/18	
	E. Pre-Qualification Completed: 6/30/18	
	F. Conflict of Interest Form Submitted to Ethics: 6/30/18	
	G. Protest Period End Date: :	
5.	**Solicitations Picked up/Downloaded**: 1	**Bids/Proposals Received**: 1
6.	**Contract Administrator**: Tanya Allen	**Telephone Number**: 213/922-1018
7.	**Project Manager**: Alex DiNuzzo	**Telephone Number**: 213/922-5860

A. Procurement Background

This Board Action is to approve Contract No. MA49128000 issued for the procurement of Bus Engine Cylinder Head Assemblies. IFB No. MA49128 was issued in accordance with Metro's Acquisition Policy and the contract type is Indefinite Delivery, Indefinite Quantity (IDIQ).

No amendments were issued during the solicitation phase of this IFB:

One bid was received on May 30, 2018.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies with Metro's Acquisition Policy for a single bid with Cummins, Inc.

Cummins, Inc. was determined to be responsive and responsible to the IFB requirements, and in full compliance with the technical requirements.

Market Survey

Metro received a single bid and staff conducted a market survey to determine the reasons for the lack of formal bid responses to this IFB. One supplier indicated that it could only supply remanufactured parts which Metro cannot accept for this requirement. Two other suppliers indicated they were unable to submit a competitive price. Staff determined that there were no restrictive elements associated with the IFB requirements and the single bidder provided an offer under a competitive environment.

C. Price Analysis

The recommended bid amount of $1,690,811 is the result of an open competitive bid process in a competitive environment. The bidder prepared its bid with an expectation of adequate price competition. Both Metro and the supplier anticipated there would be more than one acceptable bid submitted. The formal bid received reflects this anticipated competition.

The bid price has been determined to be fair and reasonable based upon a price analysis conducted by staff and the determination that an environment of adequate competition existed at the time of bid. The price analysis compared Cummins' price offered to the historical pricing on previous purchases and other pricing information from Cummins. Overall, the total bid price has been deemed fair and reasonable.

Line Item No.	Low Bidder Name	Bid Amount for Line 1	Metro ICE
1.	Cummins Inc.	$1,690,811	$1,711,000

D. Background on Recommended Contractor

The recommended firm, Cummins Inc., is located in Irvine, CA and has been in business for 26 years. Cummins, Inc. has provided similar products for other agencies including Orange County Transportation Authority, San Diego Metropolitan Transit System, and Santa Monica's Big Blue Bus. Cummins has provided satisfactory service and products to Metro on previous purchases.

DEOD SUMMARY

BUS ENGINE CYLINDER HEAD ASSEMBLIES/MA49128000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not establish a Disadvantaged Business Enterprise (DBE) goal for this solicitation due to lack of subcontracting opportunities. Cummins, Inc. is an Original Equipment Manufacturer (OEM) of the Cylinder Head Assembly Engine part that is shipped directly to Metro.

B. Living/Prevailing 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 wages are 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.

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

Metro

Board Report

File #: 2018-0496, **File Type:** Contract **Agenda Number:** 19.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: BUS ENGINE IGNITION COILS

ACTION: CONTRACT AWARD

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a two year, Indefinite Delivery, Indefinite Quantity Contract No. MA48849-2000 to Cummins Inc. for bus engine ignition coils with a first year base contract amount of $678,129, inclusive of sales tax, and a second year contract amount of $695,106, inclusive of sales tax, for a total contract value of $1,373,235, subject to resolution of protest(s), if any.

ISSUE

This procurement is for the acquisition of new bus engine ignition coils which are required for maintaining the safe and reliable operation of the bus fleet. Award of this Contract will ensure that Bus Maintenance has adequate inventory to repair and maintain buses according to Metro maintenance standards.

BACKGROUND

The component usage reports from Material Management revealed that over 5,000 engine ignition coils were issued to Bus Maintenance to replace failed components and to support replacement during engine rebuild programs. The engine ignition coils are installed by Metro Mechanics at the Central Maintenance Shops and at all bus operating divisions. Buses cannot operate without properly functioning engine ignition coils.

DISCUSSION

Ignition coils are an electronic engine management component that are a part of the bus's ignition system. The ignition coil is the component responsible for generating the engine spark, and any problems with the ignition coil can quickly lead to engine performance issues. The engine ignition coils support over 90% of our bus fleet which have Cummins 8.9 ISLG and L9N Near-Zero engines installed. The ignition coil is an Original Equipment Manufacturer (OEM) part delivered direct from the engine manufacturer, Cummins, due to historical problems encountered with aftermarket ignition parts, including increased road calls and service reliability.

The Contract to be awarded is a “requirements type” agreement in which we commit to order only from the awardee, up to the specified quantity for a specific duration of time, but there is no obligation or commitment for us to order any or all of the ignition coils that may be anticipated. The bid quantities are estimates only, with deliveries to be ordered and released as required. The Diversity and Economic Opportunity Department (DEOD) did not recommend a Disadvantaged Business Enterprise (DBE) goal for this solicitation due to the lack of opportunities for subcontracting. Opportunities for subcontracting were not apparent. The purchased engine ignition coils are installed by Metro Mechanics.

Bus engine ignition coils will be purchased and maintained in inventory and managed by Material Management. As ignition coils are issued, the appropriate budget project numbers and accounts will be charged.

DETERMINATION OF SAFETY IMPACT

Award of contract will ensure that all operating divisions and the Central Maintenance Facility have an adequate inventory to maintain the equipment according to Metro Maintenance standards.

FINANCIAL IMPACT

Funding in the amount of $678,129 for these ignition coils is included in the FY19 budget under account 50441, Parts - Revenue Vehicle in multiple bus operating cost centers under project 306002 Operations Maintenance, and in the Central Maintenance cost center 3366 under project 203035 Bus Engine Replacement Project.

Since this is a multi-year contract, the cost center manager and Chief Operations Officer will be accountable for budgeting the cost in future fiscal years.

Impact to Budget

The current source of funds will come from Federal, State, and local funds including sales tax and fares. This fund allocation maximizes allowable fund use given approved provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. This project will maintain the reliability of the bus fleet, 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 alternative is to not award the Contract and procure engine ignition coils on the open market on an as-needed basis. This approach is not recommended since it does not provide a commitment from the supplier to ensure availability and price stability.

NEXT STEPS

Metro's requirements for bus engine ignition coils will be fulfilled under the provisions of the Contract.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared By: James D. Pachan, Superintendent of Maintenance, (213) 922-5804

Reviewed by: Debra Avila, Chief Vendor/Contract Management (213) 922-6383
James T. Gallagher, Chief Operations Officer (213) 418-3108

Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

BUS ENGINE IGNITION COILS/MA44849-2000

1.	**Contract Number**: MA48849-2000	
2.	**Recommended Vendor**: Cummins Inc.	
3.	**Type of Procurement (check one):** ☒ **IFB** ☐ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: May 3, 2018	
	B. Advertised/Publicized: May 4, 2018	
	C. Pre-Bid Conference: N/A	
	D. Bids Due: June 6, 2018	
	E. Pre-Qualification Completed: June 25, 2018	
	F. Conflict of Interest Form Submitted to Ethics: June 25, 2018	
	G. Protest Period End Date: September 28, 2018	
5.	**Solicitations Picked up/Downloaded**: 7	**Bids Received**: 3
6.	**Contract Administrator**: Mona Ismail	**Telephone Number**: 213-922-7376
7.	**Project Manager**: Alex DiNuzzo	**Telephone Number**: 213-922-5860

A. Procurement Background

This Board Action is to approve Contract No. MA48849-2000 issued in support of procurement of ignition coils for Metro's natural gas fueled heavy duty engines. Board approval of contract award is subject to resolution of any properly submitted protest.

IFB No. MA48849-2 was issued in accordance with Metro's Acquisition Policy and the contract type is an indefinite delivery, indefinite quantity.

No amendments were issued during the solicitation phase of this IFB.

A total of three bids were received on June 6, 2018.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies with Metro's Acquisition Policy for a competitive sealed bid. The three bids received are listed below in alphabetical order:

1. CBM US, Inc.
2. Cummins Inc.
3. The Aftermarket Parts Co. DBA New Flyer Parts

Only Cummings Inc. and The Aftermarket Parts Inc. were determined to be responsive and responsible, and in full compliance with the requirements of the IFB. CBM US, Inc. was non-compliant to the IFB Buy America requirement.

C. Price Analysis

The recommended bid price from Cummins, Inc. has been determined to be fair and reasonable based upon adequate price competition and selection of the lowest responsive and responsible bidder.

Bidder Name	Bid Amount	Metro ICE
Cummins Inc.	$1,373,235.12	**$1,353,600.00**
The Aftermarket Parts Co.	$1,622,684.88	**$1,353,600.00**

D. Background on Recommended Contractor

The recommended firm, Cummins Inc., located in Irvine, CA has been in business for 99 years, and is a leader in heavy duty commercial engines. Cummins currently has multiple contracts with Metro for fuel flow valves, head assembly kits and for fuel pressure regulator valves. Cummins has and continues to provide satisfactory products and services to Metro.

DEOD SUMMARY

BUS ENGINE IGNITION COILS/MA44849-2000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not establish a Disadvantaged Business Enterprise (DBE) goal for this solicitation due to lack of subcontracting opportunities. Cummins, Inc. is an Original Equipment Manufacturer (OEM) of the Bus Engine Ignition Coil part that is shipped directly to Metro and installed by Metro staff.

B. Living/Prevailing 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 wages are 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.

Los Angeles County
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One Gateway Plaza
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Board Report

File #: 2018-0503, **File Type:** Contract **Agenda Number:** 20.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: A650 STATIC CONVERTER LOW VOLTAGE POWER SUPPLY (LVPS) ASSEMBLY (OPTION-BUY FLEET)

ACTION: CONTRACT AWARD

RECOMMENDATION

AWARD a 60-month indefinite quantity/indefinite delivery Contract No. MA48386000 to Knorr-Bremse PowerTech to overhaul up to 42 Static Converter LVPS Assemblies for the A650 Option Rail Vehicle for a not-to-exceed amount of $1,308,394, subject to resolution of protest(s), if any.

ISSUE

The Original Equipment Manufacturer (OEM) establishes a timeline for vehicle maintenance and major systems overhauls in order to maintain the safety and level of performance of their vehicles.

Implementation of this overhaul program helps ensure the A650 Option-buy fleet remains in a constant State of Good Repair (SGR) by overhauling multiple systems on the vehicles including friction brake, doors, gear units, traction motors, trucks and suspension, LVPS and coupler systems. Completing this scheduled overhaul will ensure equipment safety, performance and longevity of the rail cars.

BACKGROUND

The Breda A650 Option-Buy Heavy Rail Vehicle Fleet is in its 21st year of revenue service operations with an average per car mileage of over 1.4 million miles, accumulated fleet mileage of over 98 million miles with consistent performance, and a reliable safety record. The A650 fleet, consisting of 74 rail cars, is due for the acquisition of Static Converter LVPS overhaul services per the original equipment manufacturer (OEM) and Metro Engineering's recommendations. The LVPS overhaul is one of fourteen vehicle systems to be overhauled which require procurement contracts.

DISCUSSION

The LVPS assembly consists of electronic and high voltage electrical components that convert nominal 750 Vdc to 37.5 Vdc while providing power to the low voltage circuits for battery charging, emergency lighting, and supply voltage to various motors and auxiliary equipment on the rail car.

Upon malfunction of the LVPS, there will be consequential negative impacts to the vehicle low voltage systems including battery malfunction, inoperability of various systems and passenger emergency lighting failures with service delays and customer inconvenience. Servicing and inspecting of the LVPS is performed by in-house maintenance personnel; however, overhaul of this equipment is beyond the level of in-house maintenance capability and is therefore required to be performed by a qualified vendor. The contractor will perform services in accordance with OEM and Metro Engineering specifications following a production schedule of two units per month.

The LVPS overhaul is one of fourteen vehicle systems to be overhauled which require procurement contracts. Systems to be overhauled or modified in this program include car interior renovations, bike area and railing modifications, loop step modification, seat insert replacement, passenger door, friction brake, air compressor, AC evaporator motor upgrade, coupler, semi-permanent drawbar, air spring replacement, traction motor, gear unit, and LVPS overhaul.

DETERMINATION OF SAFETY IMPACT

Passenger and employee safety are of the utmost importance to Metro and, therefore, it is imperative to maintain the A650 Option-Buy fleet to a constant state of good repair. The LVPS overhaul is in support of the complete A650 component overhaul program. This effort will ensure that these vehicles are maintained by OEM recommendations and regulatory standards, according to the defined schedule and technical specification requirements, and within Metro's internal Corporate Safety standards.

FINANCIAL IMPACT

The total contract amount is $1,308,394. Funding of $50,000 for this procurement is included in the FY19 budget in cost center 3942, Rail Fleet Services Maintenance Red Line, under project number 206034, line item 50316, Professional & Tech Service.

Since this is a multi-year contract, the cost center manager, project manager and Sr. Executive Officer, Rail Fleet Services will ensure that the balance of funds is budgeted in future fiscal years

Impact to Budget

The Current source of funding for this acquisition is Proposition A 35% debt. This funding source maximizes allowable uses given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. 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 LVPS Assembly is a safety critical system required to be overhauled per the OEM and regulatory requirements. To avoid catastrophic equipment failures of the LVPS electronic components and to avoid service delays and customer inconvenience deferring this overhaul is not recommended as Metro could also be subject to penalties mandated by the California Public Utilities Commission.

NEXT STEPS

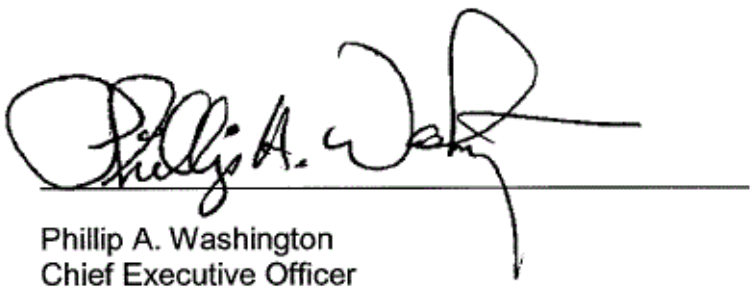
Overhaul of the Static Converter LVPS Assembly on the A650 Heavy Rail vehicles will continue in accordance with Rail Fleet Services scheduled requirements. If approved, the project is scheduled to commence in December 2018.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: Fred Kan, Director, Rail Fleet Services, (213) 922-3304
Richard M. Lozano, Sr. Director, Rail Vehicle Acquisition & Maintenance (310) 816-6944
Robert Spadafora, Sr. Executive Officer, Rail Fleet Services (213) 922-3144

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

PROCUREMENT SUMMARY

A650 STATIC CONVERTER LVPS ASSEMBLY OVERHAUL/MA48386000

1.	**Contract Number**: MA48386000	
2.	**Recommended Vendor**: Knorr-Bremse PowerTech Corp USA	
3.	**Type of Procurement (check one):** ☐ **IFB** ☒ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: December 22, 2017	
	B. Advertised/Publicized: December 28, 2017	
	C. Pre-Proposal Conference: January 12, 2018	
	D. Proposals Due: February 23, 2018	
	E. Pre-Qualification Completed: June 27, 2018	
	F. Conflict of Interest Form Submitted to Ethics: June 20, 2018	
	G. Protest Period End Date: September 6, 2018	
5.	**Solicitations Picked up/Downloaded**: 14	**Proposals Received**: 2
6.	**Contract Administrator**: Jean Davis	**Telephone Number**: 213/922-1041
7.	**Project Manager**: Fred Kan	**Telephone Number**: 213/922-3304

A. Procurement Background

This Board Action is to approve Contract No. MA48386000 issued in support of Metro's A650 Heavy Rail Vehicle (HRV) to procure services required for the overhaul of the Static Converter Low Voltage Power Supply (LVPS) Assemblies. Board approval of this contract award is subject to resolution of any properly submitted protest(s).

The Request for Proposal (RFP) was issued in accordance with Metro's Acquisition Policy the contract type an Indefinite Delivery, Indefinite Quantity (IDIQ).

Three amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on January 26, 2018, revised the proposal due date.
- Amendment No. 2, issued on February 8, 2018, revised technical specifications and the proposal due date.
- Amendment No. 3, issued on February 15, 2018, provided changes to the RFP and revised the due date from February 16, 2018 to February 23, 2018.

A pre-proposal conference was held on January 12, 2018 and there were seven attendees. Two proposals were received.

B. Evaluation of Proposals

This procurement was conducted in accordance and complies with Metro's Acquisition Policy for a Technically Acceptable Lowest Price (TALP) competitive RFP procurement process. The two proposals received are listed in alphabetical order below:

	Proposer Name
1.	Knorr-Bremse PowerTech Corp. USA (Knorr-Bremse PowerTech)
2.	PSI Repair Services, Inc. (PSI)

A Proposal Evaluation Team (PET), consisting of Metro staff members from Rail Fleet Services, Rail Vehicle Engineering, and Rail Vehicle Acquisitions and Maintenance departments, convened and conducted the evaluation of the proposals received. The two proposals were evaluated based upon the pre-established evaluation criteria defined in the RFP.

The following represents the ratings by the PET on each proposer:

Proposers	Rating
Knorr-Bremse PowerTech	Technically Acceptable
PSI	Technically Unacceptable

PSI did not meet several of the pre-established evaluation criteria listed in the RFP and were deemed to be technically unacceptable. Knorr-Bremse PowerTech met all the pre-established evaluation criteria listed in the RFP and was found to be technically acceptable, responsive and responsible to all the RFP requirements.

Market Analysis

A market analysis was performed by staff to determine the reasons Metro only received two proposals. Staff found that the RFP was downloaded by 14 separate entities. One firm advised Metro's staff it was unable to obtain quotes and testing information from the Original Equipment Manufacturer (OEM). Another firm indicated that it was unable to meet and comply with the evaluation criteria defined in the RFP. The remaining firms contacted for the survey were either unavailable or non-responsive to Metro's request for information. Staff also re-examined the RFP requirements and determined the requirements were not restrictive. Staff determined that the RFP did not prohibit free and open competition and the RFP was conducted in a competitive environment.

C. Price Analysis

Knorr-Bremse PowerTech's total proposal price has been determined to be fair and reasonable based on adequate competition and historical price comparisons of the same or similar overhaul services.

Proposer Name	Proposal Amount	Metro ICE
Knorr-Bremse PowerTech	$1,308,394	$919,000

D. Background on Recommended Contractor

Knorr-Bremse PowerTech, located in Mount Olive, New Jersey, has expertise and capabilities in the areas of power conversion, electrical equipment for rail vehicles, industrial and research applications. Knorr-Bremse PowerTech has compiled 40+ years of providing and overhauling auxiliary power systems, battery chargers, and low voltage power supplies to rail authorities and the industry. The firm has current auxiliary inverter overhaul contracts with St. Louis Metro and TriMet of Oregon. Knorr-Bremse PowerTech has existing and past contracts with Metro supporting other rail vehicle overhauls and its performance has performed satisfactory.

ATTACHMENT B

DEOD SUMMARY

A650 STATIC CONVERTER LVPS ASSEMBLY OVERHAUL / MA48386000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 3% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) goal for this solicitation. KB-PowerTech met the goal by making a 3% SBE and 3% DVBE commitment.

Small Business Goal	3% SBE & 3% DVBE	Small Business Commitment	3% SBE & 3% DVBE

	SBE Subcontractors	% Committed
1.	Say Cargo Express, Inc.	3.00%
	Total Commitment	**3.00%**

	DVBE Subcontractors	% Committed
1.	AmeriVet Logistics, Inc.	3.00%
	Total Commitment	**3.00%**

B. Living/Prevailing 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 wages are 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.

Los Angeles County
Metropolitan Transportation
Authority
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Metro

Board Report

File #: 2018-0505, **File Type:** Oral Report / Presentation **Agenda Number:** 21.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: OPERATIONS EMPLOYEE OF THE MONTH

RECOMMENDATION

Operations Employee of the Month

DISCUSSION

Operations Employee of the Month recognizes Transportation, Maintenance and Logistics frontline employees for their outstanding leadership contributions to the Operations Department.

ITEM XX

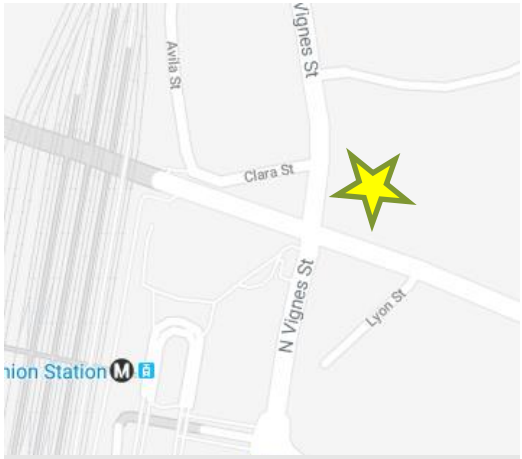
September
Employees of the Month

Metro

Employees of the Month

Transportation

Transportation Operation Supervisor Devinder Singh



Division 13 – Los Angeles

Maintenance

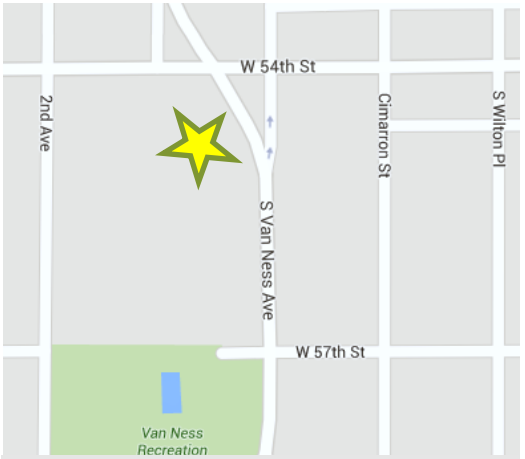
Rail Electronic Comm. Inspector Ahmad Salamah

Location 62 – Los Angeles

Logistics

Storekeeper

Ron Cargus



Division 5 – Los Angeles

Metro

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Los Angeles, CA

Metro

Board Report

File #: 2018-0507, **File Type:** Informational Report **Agenda Number:** 22.

OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: MONTHLY UPDATE ON TRANSIT POLICING PERFORMANCE

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE Monthly Update on Transit Policing Performance.

ISSUE

This report reflects July 2018 performance data as reported under the transit policing deployment strategy which is a combination of in-house fare compliance officers, private security for fixed assets and a multi-agency law enforcement deployment strategy by the Los Angeles Police Department (LAPD), Los Angeles County Sheriff's Department (LASD), and Long Beach Police Department (LBPD). The information in this report summarizes system-wide Part 1 and Part 2 crime data, average emergency response times, assaults on bus operators, and Metro's fare compliance and homeless outreach efforts. The Six Key Performance Indicators (KPI) are System Wide Part 1 and Part 2 Crimes, Average Emergency Response Times, Percentage of Time Spent on the System, Ratio of Staffing Levels vs Vacant Assignments, Ratio of Proactive vs Dispatched Activity, and Number of Grade Crossing Operations.

DISCUSSION

Crime stats are as follows:

July

For the month of July 2018, Part 1 crime activity decreased by 21.7% system-wide compared to the same period last year. In a monthly contrast, there were 20 less Part 1 crimes in July than in June, resulting in a 12.2% decrease. The total Part 1 crimes equated to 4 crimes per 1 million boardings.

Part 2 crime activity decreased by 23.4% system-wide compared to the same period last year. In a monthly contrast, there were 12 less part 2 crimes in July than in June, resulting in a 10.3% decrease. Please note a 2018/2017 comparison of June Part 1 and 2 data was incomplete due to the mobilization phase of the new multi-agency model.

July Summary by Mode:

Part 1 crime on the rail system decreased by 14.15% compared to the same period last year. Part 1 crime on the bus system decreased by 32.05% (there were 25 less Part 1 crimes committed than the same period last year.

July Bus Operator Assaults:
There were five (5) bus operator assaults reported in July, there were 5 less operator assaults compared to the same period last year, which resulted in a 50% decrease.

Average Emergency Response Times:
Emergency response times averaged 4.80 minutes for the month of July.

Physical Security Improvements:
The Systems Security and Law Enforcement division continues to provide a secure and safe environment for our patrons and employees. Our Metro Facility physical security assessment was completed, and the report was presented to key Metro leaders in Bus and Rail Operations, Information Technology and Facilities. We are planning on a physical security assessment of Union Station which will begin in the August 2018.

Significant Activities:

Los Angeles Police Department
7/1/18- Subject was arrested for performing lewd acts at Purple Line Wilshire/Western Station.

7/15/18- Law enforcement officers responded to a suspicious package at Red Line Pershing Square Station; upon search, no package was found.

7/29/18- Subject was arrested for trespassing at Red Line Pershing Square Station.

Los Angeles County Sheriff's Department
7/5/18- Subject was arrested for robbery at Green Line Lakewood Station.

7/8/18- Subject was arrested for vandalism at Blue Line Slauson Station.

7/15/18- Subject was arrested for vandalism at Expo Line Downtown Santa Monica Station.

Long Beach Police Department
7/7/18- Law enforcement officers safely evacuated patrons from train that loss power at Blue Line 5th St Station.

7/7/18- Patron was battered at Blue Line 5th St Station; police report was filed.

7/20/18- Law enforcement officers continue investigation of an attempted kidnap at Blue Line Willow Station.

Community and Problem Oriented Policing Activities:
Transit Law Enforcement Officers attended a Metro Homeless Task Force meeting on July 23. Additionally, law enforcement officers attended "RAP Sessions" at multiple Metro Divisions.

Metro's Homeless Efforts:
In spring 2016, Metro created the Metro Homeless Task Force to address the displaced persons that have turned to Metro system and property for alternative shelter. Out of the Task Force, Metro created the Metro Transit Homeless Action Plan which was presented to the Metro Board of Directors in February 2017. The Action Plan's goals are to enhance the customer experience, maintain a safe and secure system, and provide coordinated outreach. Components of the plan include Metro's coordination with County and City Measure H and Measure HHH. The plan also called for the hiring of two C3 teams (County, City, Community) through the County Department of Health Services as indicated by Metro's Board of Directors. The C3 teams are to provide coordinated and responsive outreach to the homeless and to ultimately get them in housing resources.

Metro's C3 Homeless Outreach Teams:
Metro's C3 Homeless Outreach teams' twelve-month pilot program began on May 22, 2017 with initial homeless outreach on the Red Line. Since the launch of Metro's C3 Homeless Outreach teams they have provided substantial homeless outreach-with 2,879 total unduplicated homeless contacts, 654 of whom have been placed into permanent housing solutions. Metro will expand C3 outreach in the FY19 budget to provide homeless outreach on rail, night owl bus service and Union Station during the evening hours.

C3 Homeless Outreach May 22, 2017 through July 3, 2018:

Performance Measure	June-July Number Served	Project Year to date Number Served
Contacts with unduplicated individuals	122	2,879
Unduplicated individuals engaged	86	1,827
Unduplicated individuals provided services (obtaining vital documents, follow-up activities, transportation, CES packet, clinical assessment, etc.) or successful referral (supportive services, benefits linkage etc.)	71	1,042
Unduplicated individuals engaged who are successfully linked to an interim housing resource	35	344
Unduplicated individuals engaged who are linked to a permanent housing resource	11	272
Unduplicated individuals engaged who are permanently housed	8	38

C3 Coordination with Law Enforcement
With Metro System Security and Law Enforcement personnel as the lead, Metro's C3 teams coordinate with LAPD's Homeless Outreach and Protective Engagement (HOPE) Teams, LASD's Mental Evaluation Teams (MET), Long Beach PD, and Metro's Transit Security Officers, in an effort to engage the homeless and provide placement into services. These law enforcement entities provide

gap service to the Red Line when the C3 Teams are off duty and provide outreach support for the rest of the system that is not part of pilot program. Being that LAPD's patrol includes the Red Line, connections were made between C3 teams and LAPD during the C3 pilot program. Of the above homeless contacts that were permanently housed for the month of July 2018, three individuals were referred by LAPD and contacted by the County E6 team. Two of these people engaged with staff, completed homeless service Coordinated Entry Service (CES) packets, and were placed in a motel. One of these two individuals is a father with four young children. A little after a week, the family was quickly matched to permanent housing. The second individual was referred to interim housing. The third individual was referred and connected to a permanent housing program. As Metro's C3 teams expand, they will coordinate with the respective police departments of that jurisdiction to provide comprehensive outreach and engagement.

Los Angeles Police Department HOPE Team Contacts

ACTION	**July**
Contacts	170
Referrals	42
5150 Hold	6
Mental Illness	9
Substance Abuse	6
Veterans	2
Shelter	6
Motel With Housing Plan	0
VA Housing	0
Return To Family	2
Transitional Long-Term Housing	2
Detox	1
Rehab	0

Sheriff Mental Evaluation Team (MET) Contacts

In addition to the below data, LASD transported 16 clients to other homeless outreach connection services, one team attended LA County's Mental Health Evaluation Teams (LACMET) training meeting host by CHP; Five teams assisted Gold Line Team leader to conduct homeless outreach

operations between Fillmore Pax and Memorial Pax during both AM and PM shifts.

ACTION	**July**
Contacts	835
Referrals	222
5150 Hold	19
Mental Illness	241
Substance Abuse	206
Veterans	8
Shelter	15
Motel With Housing Plan	0
VA Housing	0
Return To Family	3
Transitional Long-Term Housing	6
Detox	2
Rehab	1

Long Beach Police Department Contacts

ACTIONJuly	
Contacts	14
Referrals	3
5150 Hold	0
Mental Illness	7
Substance Abuse	3
Veterans	1
Shelter	0
Motel With Housing Plan	0
VA Housing	0
Return To Family	0
Transitional Long-Term Housing	8
Detox	0
Rehab	0

FY19 Officer Expansion:
Metro's contracted law enforcement specialized in homeless engagement will increase during FY19. LAPD HOPE officers will be increased from 10 part time officers to 10 full time officers, LASD MET deputies will be increased from 6 to 10, and Long Beach PD will hire 2 quality of life officers.

Metro's Encampment Protocol:
LAPD HOPE and Sheriff's MET teams continue to provide enforcement and outreach on city properties abutting Metro. Metro is contracting the sorting and storage services as prescribed by the law to support the protocol.

Measure H Generalist:
Metro's Homeless Action Plan integrates itself into the work provided under Measures H and HHH. Part of the E6 Strategies of Measure H includes 40 additional outreach workers otherwise known as "generalists" to conduct outreach on government properties including Metro, and countywide parks, libraries, beaches and harbors. These generalists will not go past the fare gates and their data, per the county will not be extrapolated for Metro. However, these generalists will work with the C3 teams to provide outreach services.

Mental Health Outreach Workers:
Metro is in the process of launching a pilot program in partnership with the LA county Department of Mental Health to have proactive mental health outreach on the system.

ATTACHMENTS

Attachment A - System-Wide Law Enforcement Overview July 2018
Attachment B - Detail by Rail Line July 2018
Attachment C - Key Performance Indicators July 2018
Attachment D - Transit Police Summary July

Prepared by: Alex Z. Wiggins, Chief, System Security and Law Enforcement, (213) 922-4433

Reviewed by: Stephanie Wiggins, Deputy Chief Executive Officer, (213) 922-1023

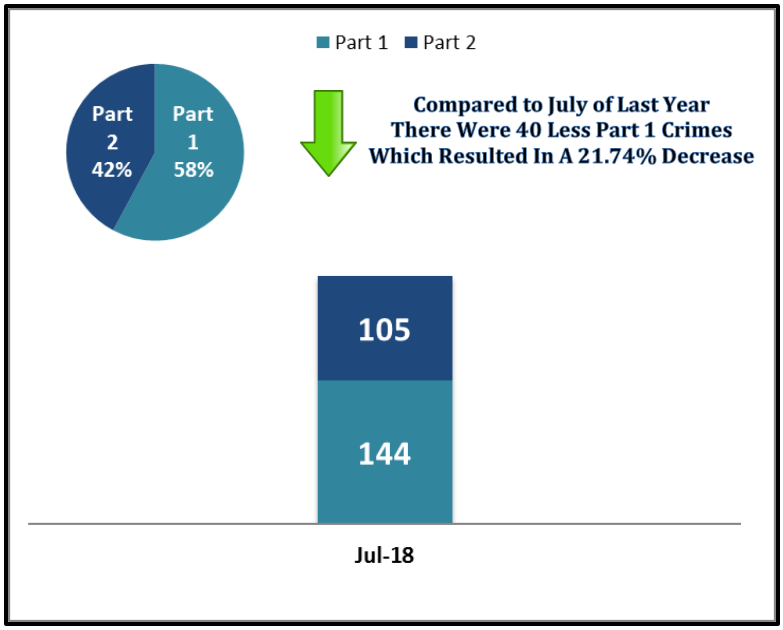
Phillip A. Washington
Chief Executive Officer

SYSTEM-WIDE LAW ENFORCEMENT OVERVIEW

JULY 2018

Attachment A

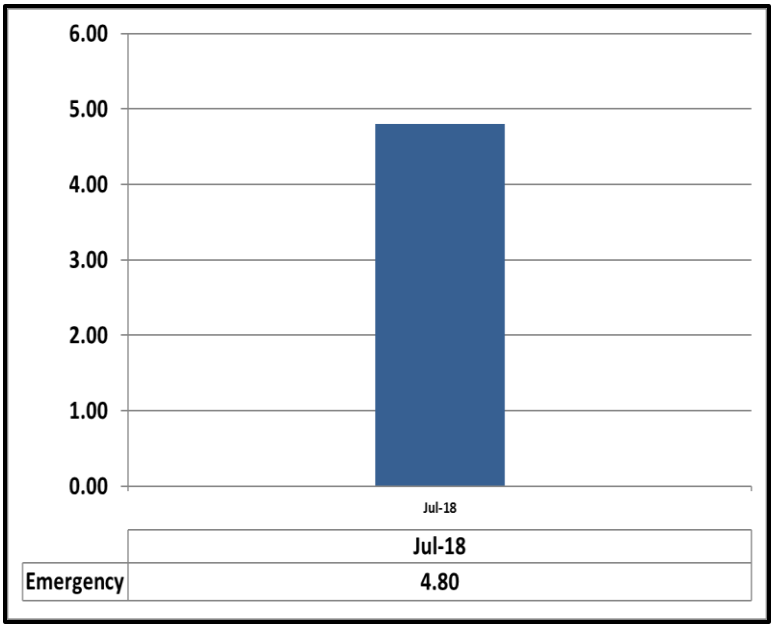
Part 1 & Part 2 Crimes



For the month of July 2018, Part 1 crime activity decreased by 21.7% system-wide compared to the same period last year. In a monthly contrast, there were 20 less Part 1 crimes in July than in June, resulting in a 12.2% decrease.

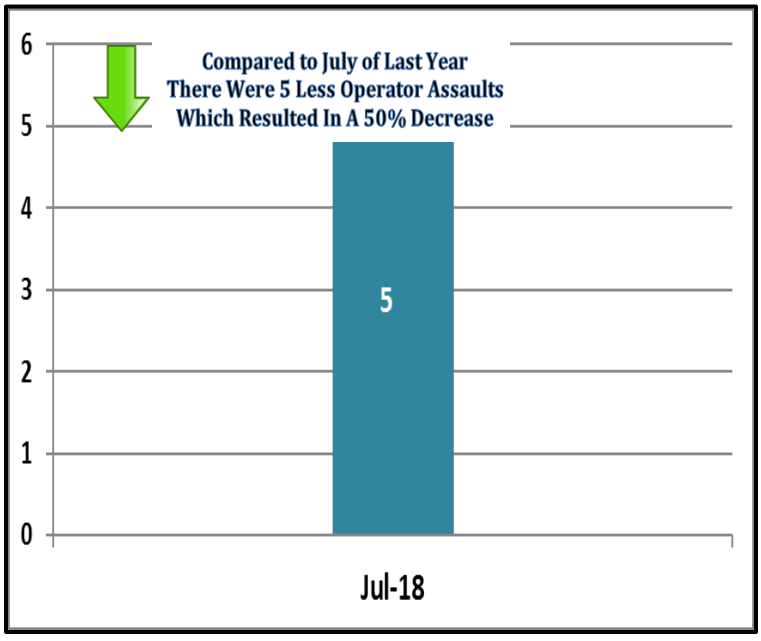
Part 2 crime activity decreased by 23.4% system-wide compared to the same period last year. In a monthly contrast, there were 12 less Part 2 crime in July than June, resulting in a 10.3% decrease.

Average Emergency Response Times



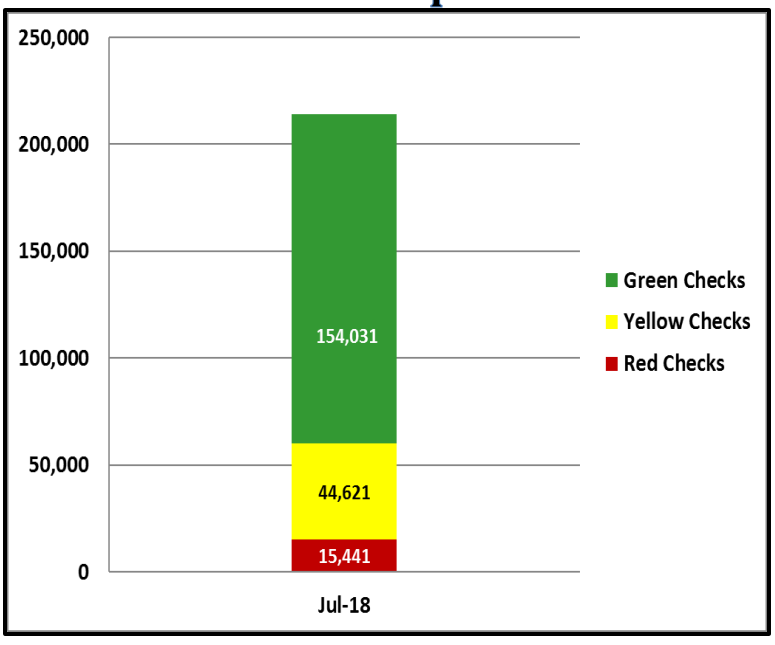
Average emergency response times were 4.80 mins.

Bus Operator Assaults



There were a total of 5 Bus Operator Assaults. Comparing the Bus Operator Assaults from the same period last year, there Were 5 Operator Assaults last year, which resulted in a 50% decrease.

Fare Compliance



Green Checks- Occurs when a patron has valid fare

Yellow Checks- Occurs when a patron has valid fare, but did not tap at transfer station

Red Checks- Occurs when a patron has invalid fare

Attachment B

Detail by Rail Line July 2018

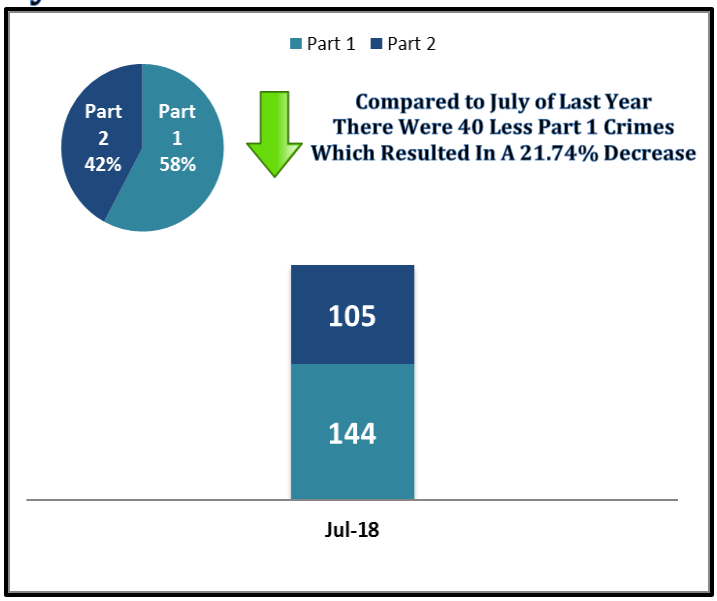
http://libraryarchives.metro.net/DB_Attachments/180822_Attachment%20B%20-%20Detail%20by%20Rail%20Line%20July%202018.pdf

Key Performance Indicators

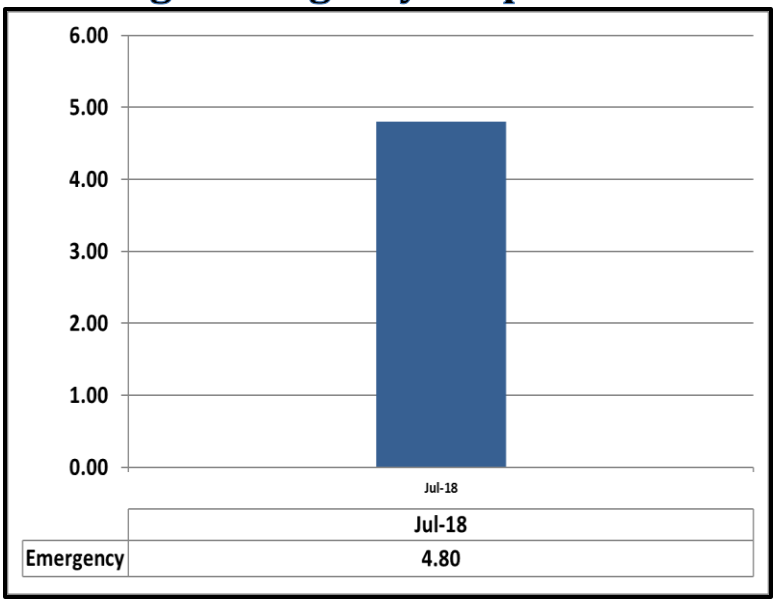
July 2018

Attachment C

System Wide Part 1 & Part 2 Crimes

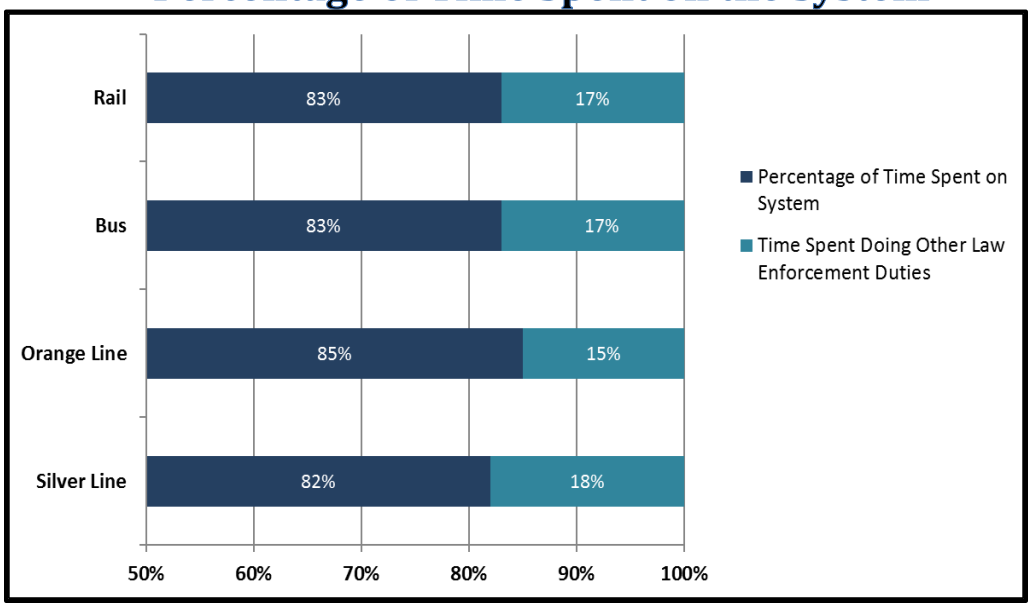


Average Emergency Response Times

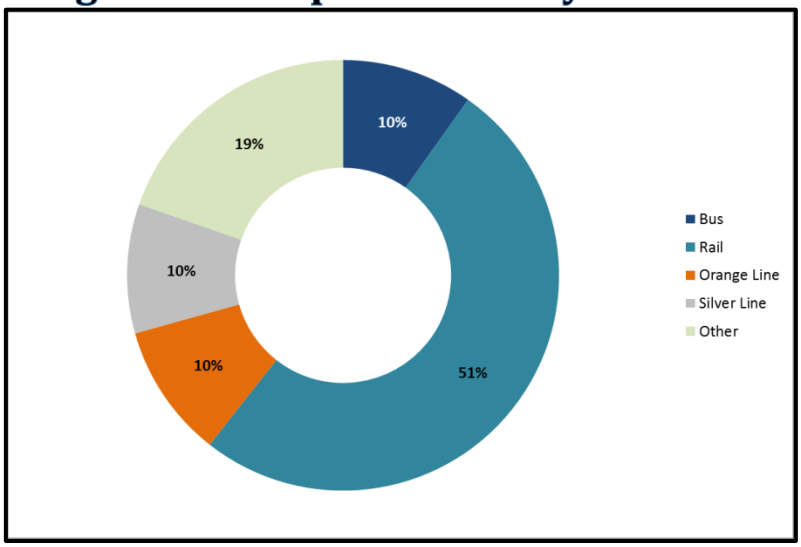


	Jul-18
Emergency	4.80

Percentage of Time Spent on the System



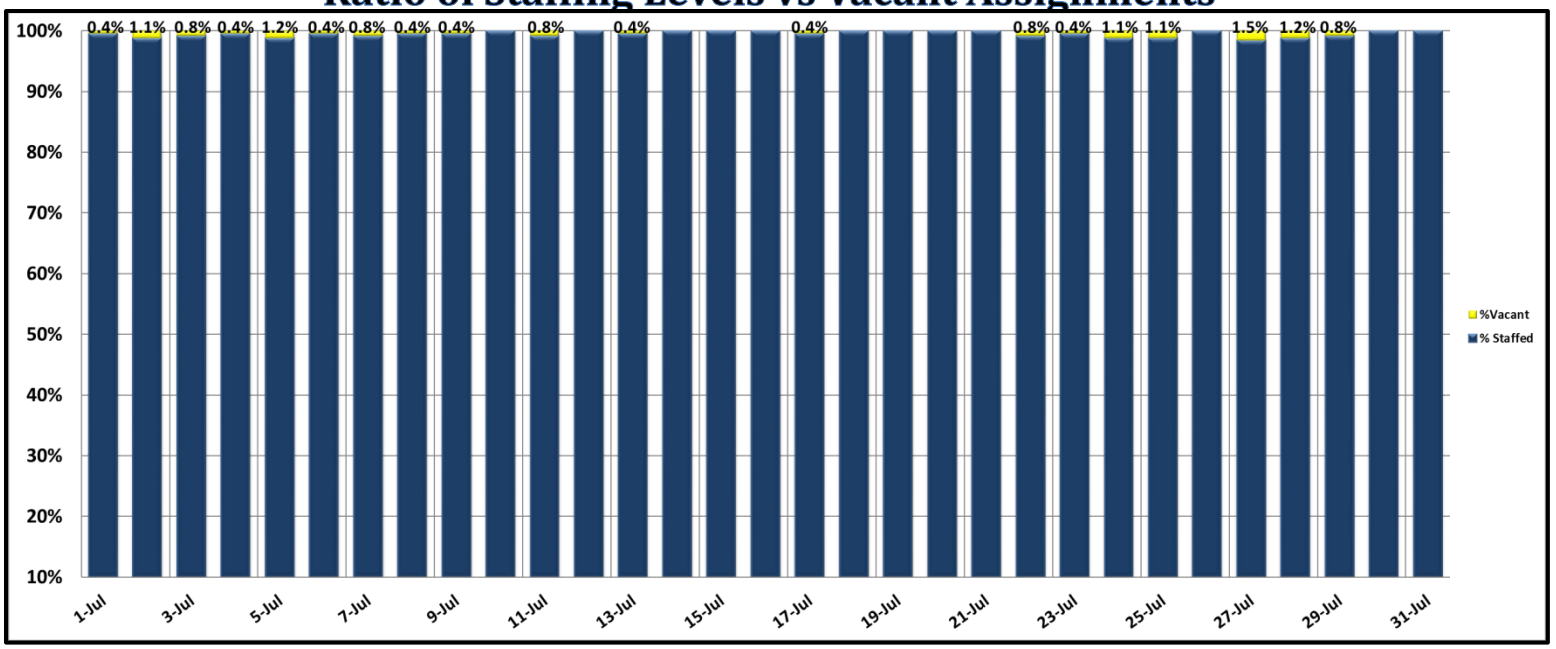
Percentage of Time Spent on the System as a Whole



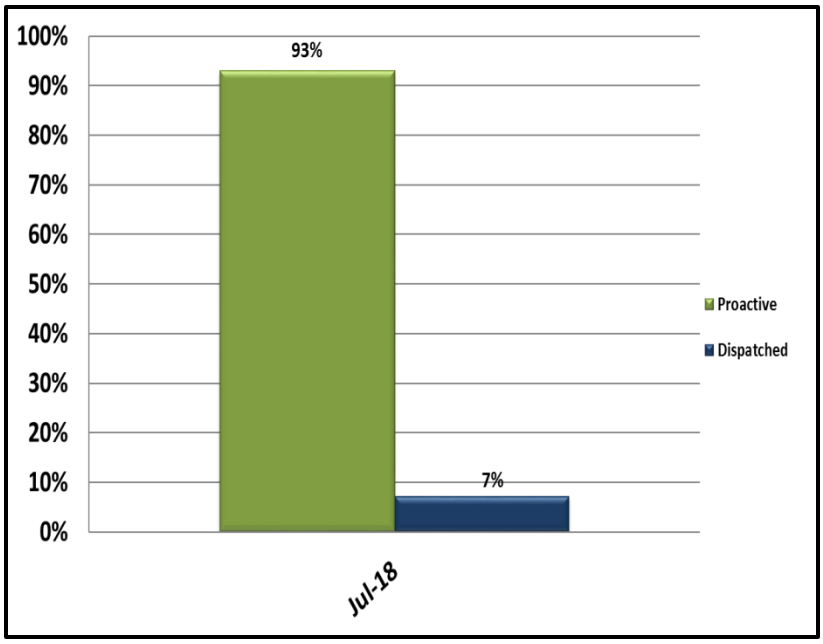
Key Performance Indicators

July 2018

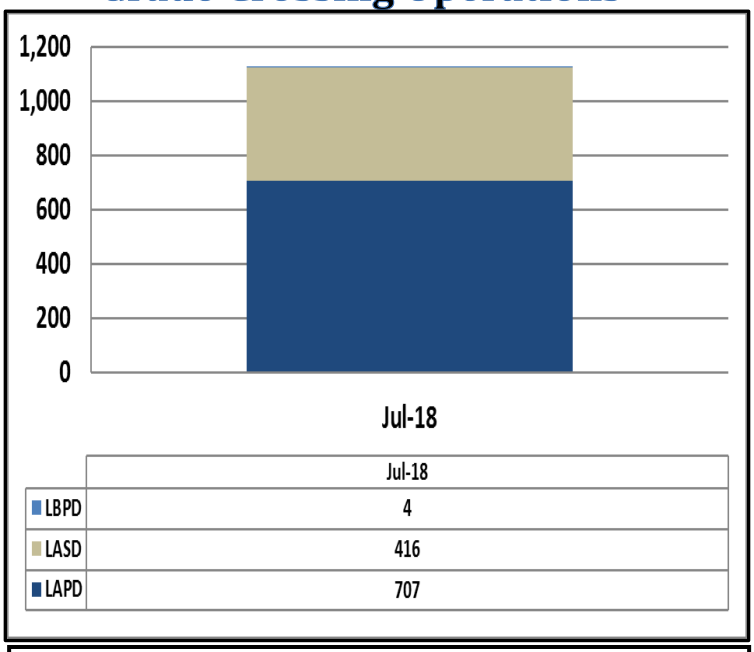
Ratio of Staffing Levels vs Vacant Assignments



Ratio of Proactive vs Dispatched Activity



Grade Crossing Operations



	Jul-18
LBPD	4
LASD	416
LAPD	707

Grade Crossing Operation Locations July:

1. Blue Line Stations (479)
2. Expo Line Stations (264)
3. Gold Line Stations (384)

Transit Police

Monthly Crime Report

Attachment D

Part 1 Crimes	2017	2018
	JULY	JULY
Homicide	0	0
Rape	3	0
Robbery	47	36
Aggravated Assault	26	29
Aggravated Assault on Operator	1	2
Burglary	6	1
Larceny	100	68
Bike Theft	0	11
Motor Vehicle Theft	9	4
Arson	0	0
Total	192	151
Part 1 Crime by Location		
Bus	107	91
Rail	77	53
Metro Division	0	0
Union Station	8	7
Total	192	151
Part 2 Crime by Location		
Bus	49	67
Rail	88	38
Metro Division	0	0
Union Station	0	10
Total	137	115
Enforcement Efforts		
Arrests	291	243
Citations	721	1,880
Fare Checks	490,399	214,093
Calls for Service	1,366	1,085

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Los Angeles, CA

File #: 2018-0046, **File Type:** Contract **Agenda Number:** 23.

**OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018**

SUBJECT: BUS SAFETY TECHNOLOGY DEMONSTRATION

ACTION: AUTHORIZE AWARD

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a sole source Contract No. PS111340000 to New Flyer of America Inc. in the amount of $1,191,500 to furnish and install a collision avoidance and mitigation technology system on forty (40) Metro transit buses.

ISSUE

Collisions are a safety and costly concern for transit properties. As reported in the Federal Transit Administration (FTA) National Transit Database (NTD) “Safety & Security Time Series Data”, in the 12 -year period from 2002-2014 the U.S. bus, paratransit and van pool industry reported 1340 fatalities, more than 201,000 injuries, and casualty and liability expenses in excess of $5.7 billion dollars.

Metro partnered with New Flyer of America Inc. (New Flyer) and the Center for Transportation and the Environment (CTE) to apply for a grant to demonstrate and evaluate collision avoidance and mitigation technologies for transit buses operating in the Los Angeles environment. The objective is to evaluate the current “state of the art”, commercially available, bus collision avoidance and mitigation systems and to assess the ability of such systems to reduce the number of vehicle, pedestrian, and cyclist collisions during transit bus service in a large urban area.

The application was approved by the FTA, Grant Number CA-2017-055, Cooperative Agreement No. 92000000SRD17, under the Safety Research and Demonstration (SRD) Program.

BACKGROUND

In July 2017 the FTA approved Metro’s grant application to evaluate and demonstrate bus collision and avoidance technologies for a period of three years. A year of technology assessment, system integration, and prototype testing will proceed the 18 month revenue service demonstration period, which will then be followed by 6 months of data analysis, bus restoration, and preparation of a final report for submission to the FTA. The application was approved by the Federal Transit Administration (FTA), Grant Number: CA-2017-055, Cooperative Agreement No. 92000000SRD17, under the Safety Research and Demonstration (SRD) Program.

DISCUSSION

Two candidate bus collision avoidance systems will be identified for the demonstration. At its new product development facilities New Flyer will install the selected systems, one each on an Xcelsior bus. The buses will then undergo comprehensive functional tests, including simulation of in-service functionality on a closed track. Design refinement may occur based on test results.

At the conclusion of the functional tests, each of the candidate systems will be installed separately on 19 more buses. These 40 buses (including two pilot installations) will begin the 18 month in service demonstration. During the demonstration, collision avoidance data, and near miss/close call data, will be collected from sources identified by CTE. In addition to collecting this data, surveys will be conducted with operators, pedestrians, and maintenance personnel. Metro's Transit Safe system will capture any actual collisions that occur which will also be made available to CTE for analysis. The intent is to gather data that can be compared against a control group of buses operating without collision avoidance technology. Specific technology performance metrics will be finalized prior to the demonstration and data collection activities.

At the conclusion of the demonstration, Metro may decide to either retain the system or remove it. If the decision is to remove it, New Flyer will do so and restore the buses to their original configuration. Also, CTE will examine and analyze the above data, survey responses and draw conclusions regarding the efficacy of each system. CTE will also draft a project report for Metro/New Flyer to review and comment. CTE will then prepare a final report for Metro to submit to the FTA.

Total project cost is anticipated to not exceed $2 million dollars. The FTA will reimburse Metro for 72.5% of the project cost while Metro is responsible for the remaining 27.5%.

DETERMINATION OF SAFETY IMPACT

It is anticipated that these buses will have a positive effect on safety. If the demonstration is successful, Metro may choose to implement collision avoidance and mitigation technology on its bus fleet, thus enhancing safety and reducing both the number and severity of collisions.

FINANCIAL IMPACT

The total not-to-exceed contract amount is $1,191,500. Estimated expenditures for FY19 are $474,460 and will be included in the FY19 Budget in Cost Center 3320 - Account 50320, Project 496002 - Collision Avoidance Demo. Since this is a multi-year contract, the cost center manager and project manager will be responsible for budgeting the balance of funds in future fiscal years.

The FTA will reimburse Metro for 72.5% of the $2 million while Metro will be responsible for the remaining 27.5%. On a scheduled milestone basis, New Flyer and CTE will submit invoices to Metro for payment. After review and approval, Metro will pay these invoices out of its own funds and seek reimbursement from the FTA. The FTA's reimbursement to Metro will be capped at $1.45 million providing that Metro fully contributes $550K to help defray the project cost. In the event that Metro's contribution falls short of $550K, the FTA's reimbursement will be reduced on a pro rata basis.

Metro's contribution will be in the form of direct labor hours charged by Metro's Operations staff who work to support this demonstration project.

New Flyer has pledged to spend $100K of its own funds to assist Metro fulfill its contribution of $550K. Metro's net contribution therefore will be $450K

Impact to Budget

The recommended action will be funded with Federal 5307, Federal 5339 and Local TDA-4 funds which is eligible for Bus and Rail Operations. Staff will continue to identify alternate Federal and Local funding sources to apply to this action as it becomes available.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. This program will improve safety, service, and reduce roadway collisions and injuries, 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

Staff considered not participating in this bus collision avoidance technology demonstration project. This is not recommended because collision avoidance technologies have advanced in the past decade to the point where they may be applied effectively to a transit bus at a reasonable cost. Metro, being a leader in the transit industry, has an obligation to lead in technology advancement for the benefit of the entire transit industry. If the demonstration proves to be successful, the project cost may be recovered by a reduction in casualty and liability expenses.

NEXT STEPS

If this action is approved, staff will execute Contract No. PS111340000 with New Flyer to perform the tasks outlined in Statement of Work / Project Management Plan (FTA TrAMS Number: CA-2017-055-00) in attachment A.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Statement of Work / Project Management Plan
Attachment C - DEOD Summary

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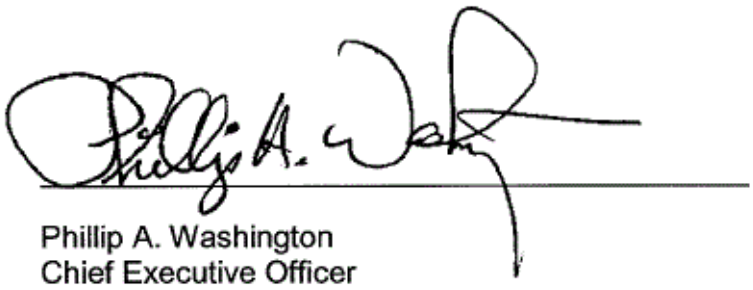

Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

DEMONSTRATION OF COLLISION AVOIDANCE TECHNOLOGY/PS111340000

1.	**Contract Number**: PS111340000	
2.	**Recommended Vendor**: New Flyer of America Inc.	
3.	**Type of Procurement (check one):** ☐ **IFB** ☐ **RFP** ☐ **RFP–A&E** ☒ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: 04/19/18	
	B. Advertised/Publicized: n/a	
	C. Pre-Proposal Conference: n/a	
	D. Proposals Due: 05/08/18	
	E. Pre-Qualification Completed: 08/06/18	
	F. Conflict of Interest Form Submitted to Ethics: 07/27/18	
	G. Protest Period End Date: n/a	
5.	**Solicitations Picked up/Downloaded**: 1	**Bids/Proposals Received**: 1
6.	**Contract Administrator**: Elizabeth Hernandez	**Telephone Number**: (213) 922-7334
7.	**Project Manager**: Michael Chang	**Telephone Number**: (213) 617-6270

A. Procurement Background

This Board Action is to approve a single source Contract No. PS111340000 to New Flyer of America Inc. (New Flyer) to furnish and install collision avoidance and mitigation technology systems on 40 Metro transit buses.

The award of this Contract is in accordance with a grant awarded by the Federal Transit Administration (FTA), Grant No. CA-2017-055, Cooperative Agreement No. 92000000SRD17, under the Safety Research and Demonstration (SRD) Program. Pursuant to the grant, Metro, New Flyer, and the Center for Transportation and the Environment (CTE) are partnering to demonstrate and evaluate collision avoidance and mitigation technologies for transit buses operating in the Los Angeles environment. New Flyer is the Contractor named in the grant award to evaluate, integrate and install the collision avoidance and mitigation systems. New Flyer is the original equipment manufacturer (OEM) for the Metro transit buses that will be used to install the collision avoidance and mitigation systems for the demonstration project.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is a firm fixed price.

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

- Amendment No. 1, issued on April 25, 2018, clarified the RFP requirements.

New Flyer submitted its proposal on May 8, 2018.

B. Evaluation of Proposal

New Flyer's submittal was determined to be responsive. The firm was deemed responsible and qualified to perform the work based on a non-competitive basis performing prototype work on their warrantied buses. The requirements of the statement of work were developed, reviewed and approved by Metro's Vehicle Technology Department.

C. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon cost analysis, an independent cost estimate, technical evaluation, fact finding, and negotiations.

	Proposer Name	Proposal Amount	Metro ICE	Negotiated or NTE amount
1.	New Flyer of America Inc.	$1,516,422	$1,368,715	$1,191,500

D. Background on Recommended Contractor

The recommended firm, New Flyer of America Inc., is a corporation organized in North Dakota, and is a wholly owned subsidiary of Transit Holdings. New Flyer is the U.S. operating company in the New Flyer group of companies, and manufactures and sells New Flyer transit buses to U.S. customers.

New Flyer is the Contractor/partner named in the grant award to evaluate, integrate and install the collision avoidance and mitigation systems on a non-competitive basis. New Flyer is the original equipment manufacturer (OEM) for the transit buses to be installed with the collision avoidance and mitigation systems for the demonstration project. These buses are still under original equipment warranty. Selecting another Contractor other than New Flyer would void Metro's bus warranty when a bus malfunctions after being materially modified or altered by a third party. Being the OEM of the demonstration buses, New Flyer is the only firm that is capable to design, evaluate, integrate and install the selected collision avoidance systems to 40 Metro transit buses. As the OEM, New Flyer has the as-built vehicle and design configuration information/data to be able to seamlessly integrate the collision and mitigation systems into the transit buses.

Statement of Work / Project Management Plan

Project Name:
Demonstration of Collision Avoidance and Mitigation Technologies on Los Angeles Metro Bus Service

FTA TrAMS Number:
CA-2017-055-00

Recipient:
Los Angeles County Metropolitan Transportation Authority

Funding Agency:
Federal Transit Administration

Date Submitted: April 21, 2017

Summary Page

Project Title:	Demonstration of Collision Avoidance and Mitigation Technologies on Los Angeles Metro Bus Service
FTA TrAMS Number:	CA-2017-055-00
Performing Agency:	Los Angeles County Metropolitan Transportation Authority
Principal Investigator:	Michael Chang Vehicle Technology and Support Los Angeles County Metropolitan Transportation Authority 100 South Santa Fe Avenue Suite 100 Los Angeles, CA 90013 Phone: 213-617-6270
Admin. Officer:	Diego Ramirez Manager Transportation Planning Regional Grants Management Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012 Phone: 213-922-2468
FTA Project Manager:	Raj Wagley, General Engineer Federal Transit Administration U.S. Department of Transportation 1200 New Jersey Ave. SE Washington, DC 20590 Phone: 202-366-5386
Performance Period:	July 1, 2017 – June 30, 2020
Funding Amount:	$1,450,000 (Federal Amount) $550,000 (Cost Share)

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1.0 PROJECT SCOPE

Background: Collisions are costly concern across transit properties. APTA has posted a document "Application of Automated Driving Technology to Bus Transit-Functional Capabilities for Safety and Capacity" detailing the costs associated with collisions. According to the report, bus transit properties reported 3,260 collisions in 2011. The result was almost 13,000 injuries, 92 fatalities, and casualty and liability expenses exceeding $480 million dollars. The report estimates the average cost per bus is more than $8,000. The statistics are even more unsettling when considering the 10-year period from 2001-2011. During that period, the bus transit industry reported nearly 900 fatalities, more than 134,000 injuries, and casualty and liability expenses in excess of $4 billion dollars.

Goal: Los Angeles County Metropolitan Transportation Authority (Metro), New Flyer Industries Inc. (New Flyer), and the Center for Transportation and the Environment (CTE) are partnering to demonstrate and evaluate collision avoidance and mitigation technology for transit buses operating in the urban environment. The objective of the project is to evaluate the current "state of the art" of commercial collision avoidance and mitigation systems and to assess the ability of such a system to reduce the number of vehicle, pedestrian, and cyclist collisions during transit bus service in a large urbanized area.

Approach: The team will evaluate commercially available collision avoidance and mitigation systems from multiple vendors and select up to two systems for demonstration. Selected systems will be installed on Metro buses and demonstrated in urban-area revenue service for 18-months. During the demonstration, collision and collision avoidance data shall be collected and reviewed to assess the effectiveness of the technology.

By having the commitment of Metro and New Flyer, the project is uniquely positioned to capture feedback from industry leaders in both the transit agency and transit vehicle manufacturer sectors. Buy-in from both of these parties is critical for the technology to be accepted and ultimately deployed in widespread revenue-service applications. Metro's urban operating environment presents unique challenges and will serve as an ideal proving ground for collision avoidance technology, which has traditionally been most well suited for rural and/or highway driving applications. New Flyer's commitment to the project will be vital to understanding the commercial readiness level of the systems, providing a path forward for commercialization. The goals of the project align with New Flyer's own safety initiatives, and New Flyer's ultimate desire is to offer the technology as integrated original equipment, as opposed to an after-market add-on feature. In addition to Metro and New Flyer, the project benefits from having CTE, an independent, non-profit organization experienced with federally funded transportation pilot projects, acting as a project manager and data collection agent.

2.0 PROJECT DESCRIPTION

Problem Statement: The benefits, costs, and capabilities of collision avoidance and mitigation technology for transit buses in an urban operating environment are not fully understood by the transit industry at this time.

History/Current Design: The development of advanced computers, sensors, and communication systems have allowed technology providers to create advanced collision avoidance and mitigation systems, such as blind spot warning, pedestrian collision warning, driver alert warning, and automatic braking. Such technologies are becoming more popular in the light-duty personal vehicle market; however, widespread adoption of these technologies has yet to occur in the transit industry. In addition, many of the available technologies are optimized for highway speeds and their effectiveness in an urban setting has not been evaluated. Five commercially available technologies are described below:

Bendix® Wingman® Fusion™ – This system integrates camera, radar and brake systems for advanced commercial vehicle driver assistance. The Mobileye System-on-Chip EyeQ processor with state-of-the-art-vision algorithms powers the camera. The radar, camera, and brake system are linked to each other – constantly gathering, sharing, and confirming information; and all the while communicating with the brakes.

OnGuardACTIVE™ (Meritor WABCO) – This system is a radar-based active safety system that offers Collision Mitigation and Adaptive Cruise Control (ACC). OnGuardACTIVE detects moving, stopped or stationary vehicles ahead and measures the vehicle's position in relation to others on the road to warn the driver of possible rear-end collision by providing audible, visual and haptic warnings. When appropriate, the system will apply the brakes to help avoid or mitigate an unavoidable collision.

Protran Technology – Protran Technology Safe Turn Alert (STA) System is a standalone, passive audible warning system designed to play an audible warning message external and/or internal to the vehicle when the vehicle is making a right or left hand turn. The system also has the option for flashing LED strobe lights that act as a visual warning to pedestrians as the vehicle is turning. There are two options for triggering the STA system; proximity sensors mounted near the pitman arm or the system can be triggered with the vehicles blinker.

Mobileye Shield+^{TM} – This Mobileye system is the most advanced collision avoidance system available on the market for trucks, buses, and commercials vehicles; it can be retrofitted to any vehicle. The system includes strategically placed multi-vision smart cameras and interior display modules that alert the driver both visually and audibly if a pedestrian or cyclist is in the driver's blind spot. It is designed to only alerts drivers if a collision is imminent with vulnerable road users, not inanimate objects. In addition, this solution includes a full telematics system which tracks the vehicle and reports all warnings made by the Mobileye System to your fleet management system, providing fleet managers with valuable information about their drivers' daily driving behavior.

The Mobileye Shield+ package includes the following lifesaving features:

- Pedestrian and Cyclist Collision Warning (Mobileye PCW)
- Forward Collision Warning (Mobileye FCW)
- Headway Monitoring Warning (Mobileye HMW)
- Lane Departure Warning (Mobileye LDW)

- Speed Limit Indicator (SLI)

Autoliv – Autoliv develops Active Safety systems with radar and vision technologies to make driving easier and safer by monitoring the environment around the vehicle, giving our active safety systems a chance to adjust engine output, steering or braking to avoid a crash. Utilizing advanced radar and vision technology, Autoliv's aim is to provide:

- Early warnings to drivers, so they can take appropriate action
- Intelligent systems that affect the vehicle's motion using braking and steering, helping the driver avoid the hazard
- Improved restraint systems that combine hazard information with traditional crash sensing methods, in case a collision is unavoidable.

Automotive radar devices are now appearing in passenger vehicles all over the world. These devices are used in advanced cruise control systems, which can direct a vehicle's accelerator and braking systems, controlling the distance between it and another vehicle.

The radar sensors note vital information, such as range, angle and Doppler velocity. This information is used to determine the driving situation and warn the driver in potentially dangerous events. If the driver does not take appropriate action in time and a crash is about to happen, advanced radar systems can take control of the vehicle to avoid the crash or lessen the accident's severity. This high level of safety functionality is maintained in bad weather and no light, when driving conditions are at their worst.

Objectives: The project will evaluate advanced collision avoidance and mitigation systems from multiple technology providers and select one or two systems for deployment and demonstration in an urban transit-operating environment. Through the demonstration, the team will be able to assess the technology's effectiveness in an urban setting with both motorized and non-motorized (pedestrians and bicyclists) traffic. The team will compare results from the demonstration against data on buses in the fleet operating without any collision avoidance technology, as well as buses currently equipped with a right-turn detection product from Protran.

Objective 1: Define system requirements and select technology for demonstration.

The team will establish constraints and criteria for the collision avoidance and mitigation system, evaluate systems offered by five different vendors (Mobileye, Bendix, Wabco, Autoliv, and Protran), and select up to two systems for demonstration in Metro's fleet.

Objective 2: Develop integration plan, and install and test prototype system(s).

The team will complete an engineering analysis (e.g. FMEA), develop a vehicle installation plan, and perform closed track performance testing and validation in preparation for deployment.

Objective 3: Install system(s) on New Flyer buses within the Metro fleet and demonstrate technologies in revenue service.

The selected system(s) will each be installed on up to 20 buses within Metro's fleet and demonstrated in revenue-service for 18 months. The demonstration sample includes up to 60 buses outfitted with collision avoidance and mitigation technology and will be constructed as follows:

Collision Avoidance and Mitigation System	**# of Buses Deployed with System up to**
1. new technology	20
2. new technology or existing Protran system with added left-turn detection	20
3. existing Protran system with right-turn detection only	20
4. no system	20

Objective 4: Define performance metrics and collect and review demonstration data.

Collision and collision avoidance data will be collected and stakeholder surveys (operator, passenger, and maintenance personnel) will be conducted throughout the demonstration period. The intent is to collect data in such a manner that results can be compared against a control group (up to 20 buses in the fleet operating without collision avoidance technology). Specific technology performance metrics will be finalized prior to the demonstration and data collection activities, which are scheduled to begin in Project Quarter 6 (Quarter 4 of 2018). A draft of the performance metrics is included in Section 9 of this Statement of Work. Tracking the performance metrics throughout the demonstration will allow the team to gauge the effectiveness and ROI of the technology.

Objective 5: Ensure the program meets all project objectives by effectively managing project scope, budget, work plan, and schedule.

Project management and administration activities are required to ensure the project meets its objectives. The project team will conduct regular conference calls (weekly or biweekly) to review project progress, risks, issues, mitigation strategies, and action items.

3.0 DETAILED PROJECT OBJECTIVES / TASKS

Objective 1: Define system requirements and select technology for demonstration.

Task 1.1 – Define Technology Requirements and Criteria
Develop requirements and criteria for integrating collision avoidance and mitigation systems within New Flyer buses in the Metro fleet. At minimum, these requirements and criteria shall include technical installation requirements (mechanical mounting, electrical interface, and communication protocol), vendor experience with same or similar applications, and commercialization potential.

Task 1.2 – Evaluate State of Art against Requirements & Criteria
Assess the ability of available collision avoidance and mitigation systems from several different vendors to meet the technology requirements and criteria. This includes product literature reviews and discussions with vendors.

Some technology providers claim to have the ability to communicate with the bus brake controller and automatically actuate the braking system without operator input. This feature will be evaluated during this phase of the project.

Task 1.3 – Select Technology for Demonstration
Select at least one and up to two collision avoidance and mitigation systems to demonstrate on New Flyer buses in the Metro fleet. System's will be selected based on their technical installation requirements (mechanical mounting, electrical interface, and communication protocol), vendor experience with same or similar applications, commercialization potential, and any other constraints or criteria that project stakeholders identify during Task 1.1.

LA Metro currently operates buses with a Protran collision avoidance system with right-turn detection capabilities. Should a new system besides Protran be selected for this project demonstration, then left turn detection capabilities will be added to the existing Protran system and this will be considered as a second technology for evaluation during the demonstration period.

Task 1.4 – Provide major documents to FTA Program Manager.
Provide major documents (non-proprietary) that show completed plans, designs, analysis, and surveys at the end of Objective 1 to FTA Program Manager.

Task 1 Deliverables/Milestones: Requirements/Criteria Document; Technology selection

Objective 2: Develop integration plan, and install and test prototype system(s).

Task 2.1 – Develop Integration Plan
Review the mechanical and electrical integration requirements of the collision avoidance and mitigation system(s), including control architecture and diagnostics. Complete the following engineering and system development work:

Mechanical Systems:
- define component layout
- complete component mounting design (bracket definition, FEA, drawings and engineering release)
- define modifications to cascading systems

Electrical Systems:
- develop theory of operation
- complete controls programming and bus integration plan, including diagnostics

- define check-out procedures

Task 2.2 – Procure Prototype Components
Order and receive collision avoidance and mitigation system(s) and other integration material (e.g. mounting brackets and wiring) for prototype testing and validation.

Task 2.3 – Install and Test Prototype System (closed track evaluation)
New Flyer will install one prototype for each of the system(s) selected in Task 1.3 for demonstration on Metro bus(es) at the New Flyer facility for test and validation. This includes a functional test of the prototype bus systems and a simulation of in-service functionality on a closed track. Design refinement may occur based on test results.

If the selected system(s) include a brake assistance feature, then New Flyer will integrate the feature with the prototype and assess the feasibility of deploying brake assistance in the real world. Ultimately, the decision to deploy a system that includes brake assistance into revenue service will be the decision of the entire team. Things unrelated to the technology, such as labor union rules, may impact the decision to utilize brake assistance.

Task 2.4 – Provide major documents to FTA Program Manager.
Provide major documents (non-proprietary) that show completed plans, designs, analysis, and surveys at the end of Objective 2 to FTA Program Manager.

Task 2 Deliverables/Milestones: Evidence of Prototype Procurement and Installation on Test bus(es); Prototype Test Report.

Objective 3: Install system(s) on New Flyer buses within the Metro fleet and demonstrate technologies in revenue service. Metro and its partners shall make sure that these experimental buses shall operate in an environment with similar operating conditions to that of the control buses to ensure like comparison.

Task 3.1 – Develop Detailed Deployment Plan
Metro will research bus routes that accumulated higher than average road collision incidents in its service area. Metro will look at these routes and note whether or not they crisscross downtown Los Angeles where a confluence of traffic by pedestrians, bicycles, motorcycles, automobiles, trucks/vans, and buses will be ideal for the demonstration of collision avoidance and mitigation technologies. Metro will also find out the number of buses that are needed to support these bus routes for all-day base runs or during peak service hours. The needs for operational flexibility and the constraints set by locking the 80 test buses on a single bus route for 18 months will be examined to determine if this approach is feasible. Another approach will be to assign the 80 test buses to a Bus Operations Division where they may be assigned daily at random to any bus route served by that Division.

Task 3.2 – System Installation
After prototype test and validation, the collision avoidance and mitigation system(s) will be installed on Metro buses. Each elected system will be installed on up to 20 buses.

Task 3.3 – Conduct Driver and Maintenance Training
The technology provider and New Flyer shall institute a training program for Operations Central Instruction (OCI) instructors so they may teach the operators at the Divisions on how to operate and react when driving a bus with a new technology.

The technology provider and NF shall conduct training for Maintenance Instruction so they may teach the mechanics at the Divisions on how to troubleshoot and repair a new technology.

Task 3.4 – Demonstrate Technology in Revenue Service
Buses equipped with the collision avoidance and mitigation technology will be deployed in revenue service for 18 months. Up to twenty (20) buses without the technology will be monitored as a control group.

The technology provider and New Flyer will stand ready to assist Metro with diagnosing and repairing an unresolved issue related to a new technology during the demonstration.

Metro will work with the Division management to ensure the 80 test buses are properly assigned and concurrently running.

Task 3.5 – System Disposition
At the end of the technology demonstration, the technology provider and New Flyer will remove the test technology and restore all test buses to their original bus configuration.

Task 3.6 – Provide major documents to FTA Program Manager.
Provide major documents (non-proprietary) that show completed plans, designs, analysis, and surveys at the end of Objective 3 to FTA Program Manager.

Task 3 Deliverables/Milestones: Detailed Deployment Plan; Evidence of System Procurement and Installation; Training Logs.

Objective 4: Define performance metrics and collect and review demonstration data.

Task 4.1 – Confirm Key Collision Metrics & Data Collection Procedure
CTE shall receive instructions on how to access Metro TransitSafe archive, how to collect collision data, and how to follow up on a collision report for the 80 test buses monitored during the demonstration.

TransitSafe is a safety database maintained by Metro Corporate Safety that categorizes safety data by incident date/time, driver name/badge number, bus type, route number, operating division, location of the incident, any injury or fatality, and statements made by the bus operator recounting the incident. These initial performance metrics, and other key performance indicators (KPIs), are shown in the Appendix. During this task, the team will identify any additional performance metrics that need to be tracked and finalize the data collection and reporting procedure.

Task 4.2 – Collect Baseline Data (experimental control)
CTE will collect daily operations and incident data on the 20 buses in the control group (buses without a collision avoidance and mitigation technology).

Task 4.3 – Collect Collision and Collision Avoidance Data
CTE will collect daily operations and incident data on the buses equipped with the experimental collision avoidance and mitigation system(s). CTE will also document the cost of the system(s) in order to conduct an ROI.

Task 4.4 – Collect Personnel Survey Data
CTE will develop and conduct surveys for Metro drivers, maintenance personnel, and passengers to help gauge strengths and weaknesses of the system(s).

Task 4.5 – Summarize and Report Data (Data Evaluation)
Data will be summarized and shared with project stakeholders every 6-months of the demonstration activity.

Task 4.6 – Provide major documents to FTA Program Manager.
Provide major documents (non-proprietary) that show completed plans, designs, analysis, and surveys at the end of Objective 4 to FTA Program Manager.

Task 4 Deliverables/Milestones: Final Description of Performance Metrics and Data Collection Procedure; 6-Month Demonstration Data Summary; 12-Month Demonstration Data Summary; 18-Month Demonstration Data Summary.

Objective 5: Ensure the program meets all project objectives by effectively managing project scope, budget, work plan, and schedule.

Task 5.1 – Draft and Execute Contract and Subcontracts
Metro will contract with FTA and execute subcontracts with New Flyer and CTE.

Task 5.2 – Conduct Project Kickoff
CTE conducts a Project Kickoff Meeting to review the project scope, schedule, and budget with stakeholders, including FTA, before beginning project activity.

Task 5.3 – Conduct Weekly Project Status Meetings
Throughout the project, the team will conduct regular conference calls (week or bi-weekly) to discuss project progress, risks, issues, mitigation strategies, and next steps. FTA Program Manager will be invited to attend.

Task 5.4 – Track Action Items and Monitor Project Budget/Schedule
CTE will track technical action items and support Metro's efforts to manage the project budget and schedule.

Task 5.5 – Draft and Distribute Quarterly Reports

CTE will document project progress in a quarterly report and share the progress reports with team members, including FTA Program Manager.

Task 5.6 – Draft and Submit Final Report
CTE will summarize project findings in a detailed report, including lessons learned and best practices for selecting and implementing collision avoidance and mitigation technologies for the urban transit application. Refer sections 6, 7 and 8.

Task 5.7 – Maintain FTA TrAMS Account
Metro will maintain the project account in FTA TrAMS. This includes posting QPRs, FFRs and MPRs. The project team will support this activity and provide information, as needed.

Task 5 Deliverables/Milestones: Project Kickoff meeting; FTA Deliverables (per Section 6);

Figure 1 shows what team member is responsible for ensuring each specific task is completed.

Objective / Task Title and Description		Organization with Lead Responsibility	Location
Objective 1 - Define system requirements and select technology for demonstration.			
1.1	Define Technology Requirements and Criteria	New Flyer	-
1.2	Evaluate State of Art against Requirements & Criteria	New Flyer	-
1.3	Select Technology for Demonstration	Team Decision	-
1.4	Provide Major Documents to FTA Program Manager	CTE	electronic
Objective 2 - Develop integration plan, and install and test prototype system(s).			
2.1	Develop Integration Plan	New Flyer	St. Cloud, MN
2.2	Procure Prototype Components	New Flyer	St. Cloud, MN
2.3	Install and Test System (closed track evaluation)	New Flyer	St. Cloud, MN
2.4	Provide Major Documents to FTA Program Manager	CTE	electronic
Objective 3 - Install system(s) on New Flyer buses within the Metro fleet and demonstrate in revenue service.			
3.1	Develop Detailed Deployment Plan	LA Metro	Los Angeles, CA
3.2	System Installation	New Flyer	Ontario, CA
3.3	Conduct Driver and Maintenance Training	LA Metro / New Flyer*	Los Angeles, CA
3.4	Demonstrate Technology in Revenue Service	LA Metro	Los Angeles, CA
3.5	System Disposition	New Flyer	Ontario, CA
3.6	Provide Major Documents to FTA Program Manager	CTE	electronic
Objective 4 - Define performance metrics and collect and review demonstration data.			
4.1	Confirm Key Collision Metrics & Data Collection Procedure	CTE	-
4.2	Collect Baseline Data (experimental control)	CTE	Los Angeles, CA
4.3	Collect Collision and Collision Avoidance Data	CTE	Los Angeles, CA
4.4	Collect Personnel Survey Data	CTE	Los Angeles, CA
4.5	Summarize and Report Data (Data Evaluation)	CTE	-
4.6	Provide Major Documents to FTA Program Manager	CTE	electronic
Objective 5 - Manage project activity and provide general oversight to ensure the program meets objectives.			
5.1	Draft and Execute Contracts/Subcontracts	LA Metro	electronic
5.2	Conduct Project Kickoff	CTE	Los Angeles, CA
5.3	Conduct Weekly Project Status Meetings	CTE	teleconference
5.4	Track Action Items and Monitor Project Budget/Schedule	CTE	electronic
5.5	Draft and Distribute Quarterly Reports	CTE	electronic
5.6	Draft and Submit Final Report	CTE	electronic
5.7	Maintain FTA TrAMS Account	LA Metro	electronic

* New Flyer will train LA Metro instructors, and LA Metro instructors will coordinate and conduct training classes with drivers and maintenance personnel. The technology provider(s) will be expected to support training activities.

Figure 1. Team Member Roles and Responsibilities

4.0 WORK SCHEDULE / MILESTONES

Figure 2 shows expected durations and completion dates for project tasks.

Objective / Task Title and Description		2017		2018				2019				2020	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Objective 1 - Define system requirements and select technology for demonstration.													
1.1	Define Technology Requirements and Criteria		■										
1.2	Evaluate State of Art against Requirements & Criteria		■										
1.3	Select Technology for Demonstration		■										
1.4	Provide Major Documents to FTA Program Manager		■										
Objective 2 - Develop integration plan, and install and test prototype system(s).													
2.1	Develop Integration Plan		■	■									
2.2	Procure Prototype Components		■	■									
2.3	Install and Test System (closed track evaluation)			■	■								
2.4	Provide Major Documents to FTA Program Manager				■								
Objective 3 - Install system(s) on New Flyer buses within the Metro fleet and demonstrate technologies in revenue service.													
3.1	Develop Detailed Deployment Plan					■							
3.2	System Installation					■							
3.3	Conduct Driver and Maintenance Training					■							
3.4	Demonstrate Technology in Revenue Service						■	■	■	■	■	■	
3.5	System Disposition												■
3.6	Provide Major Documents to FTA Program Manager												■
Objective 4 - Define performance metrics and collect and review demonstration data.													
4.1	Confirm Key Collision Metrics & Data Collection Procedure					■							
4.2	Collect Baseline Data (experimental control)					■	■	■	■	■	■	■	
4.3	Collect Collision and Collision Avoidance Data						■	■	■	■	■	■	
4.4	Collect Personnel Survey Data						■	■	■	■	■	■	
4.5	Summarize and Report Data (Data Evaluation)						■	■	■	■	■	■	■
4.6	Provide Major Documents to FTA Program Manager												■
Objective 5 - Manage project activity and provide general oversight to ensure the program meets all project objectives.													
5.1	Draft and Execute Contracts/Subcontracts	■											
5.2	Conduct Project Kickoff	■											
5.3	Conduct Weekly Project Status Meetings	■	■	■	■	■	■	■	■	■	■	■	■
5.4	Track Action Items and Monitor Project Budget/Schedule	■	■	■	■	■	■	■	■	■	■	■	■
5.5	Draft and Distribute Quarterly Reports	■	■	■	■	■	■	■	■	■	■	■	■
5.6	Draft and Submit Final Report												■
5.7	Maintain FTA TrAMS Account	■	■	■	■	■	■	■	■	■	■	■	■

Figure 2. Task Schedule (Gantt Chart)

5.0 BUDGET PLAN

FTA's Funding Source and budget for this project are as follow:

49 U.S.C. Section 5312, FY 2016: $483,331
49 U.S.C. Section 5312, FY 2017: $966,669
Total FTA funds: $1,450,000

Letter of No Prejudice (LONP):

LA Metro has requested FTA to grant a Letter of No Prejudice (LONP). This LONP will enable Metro and its project partners to recoup the initial expenses related to contracting, project kickoff preparation, and other administrative activity that must occur before technical tasks can begin prior to development and approval of a cooperative agreement between FTA and Metro, which is expected by June 30, 2017. FTA approved LONP request on May 25, 2017.

Deferral Cost Match:

A deferral for cost share for each invoice submission has been requested for approval from FTA. Given the partnership with others and Metro's in-kind support, meeting the local match requirements for each and every invoice would not be possible. The cost share targets will be met cumulatively by the end of the project as follows: FTA Share 72.5%; LA Metro share 27.5%.

The Project Budget aligns with the Objective and Task structure scope. The budget to complete each project objective is shown in Table 1.

One of each selected collision and avoidance system will be purchased and installed as part of Objective 2. The remaining systems will be bought and installed as part of Objective 3.

Table 1. Budget Distribution by Primary Objectives / Tasks (all values USD).

	Fed. Share	Cost Share
Objective 1 – Define system requirements and select technology…	**48,373**	**40,000**
1.1 - Define Technology Requirements and Criteria		
1.2 - Evaluate State of Art against Requirements & Criteria		
1.3 - Select Technology for Demonstration		
1.4 - Provide Major Documents to FTA Program Manager		
Objective 2 – Develop Integration Plan and Test Prototype(s)…	**400,000**	**80,000**
2.1 - Develop Integration Plan		
2.2 - Procure Prototype Components		
2.3 - Install and Test System (closed track evaluation)		
2.4 - Provide Major Documents to FTA Program Manager		
Objective 3 – Install and Demo System(s) in Revenue Service…	**748,658**	**268,242**
3.1 - Develop Detailed Deployment Plan		
3.2 - System Installation		
3.3 - Conduct Driver and Maintenance Training		
3.4 - Demonstrate Technology in Revenue Service		
3.5 - System Disposition		
3.6 - Provide Major Documents to FTA Program Manager		
Objective 4 – Define Performance Metrics and Collect Demo Data…	**93,663**	**50,000**
4.1 - Confirm Key Collision Metrics & Data Collection Procedure		
4.2 - Collect Baseline Data (experimental control)		
4.3 - Collect Collision and Collision Avoidance Data		
4.4 - Collect Personnel Survey Data		
4.5 - Summarize and Report Data (Data Evaluation)		
4.6 - Provide Major Documents to FTA Program Manager		
Objective 5 – Manage Project Activity and Provide Oversight…	**127,806**	**52,509**
5.1 - Draft and Execute Contract and Subcontracts		
5.2 - Conduct Project Kickoff		
5.3 - Conduct Weekly Project Status Meetings		
5.4 - Track Action Items and Monitor Project Budget/Schedule		
5.5 - Draft and Distribute Quarterly Reports		
5.6 - Draft and Submit Final Report		
5.7 - Maintain FTA TrAMS Account		
Travel:	**31,500**	
Contingency:		**59,249**
Total:	**1,450,000**	**550,000**

6.0 FTA DELIVERABLES

The project team will submit the following documents/reports to the FTA project Manager per the schedule below:

SOW Draft – 5/1/2017
Performance Metrics Summary Table Draft – 5/1/2017
FFR, MPR, QPR – Quarterly throughout project timeline
Interim Technology Performance Report (Data Summary) #1 – Quarter 2, 2019
Interim Technology Performance Report (Data Summary) #2 – Quarter 4, 2019
Interim Technology Performance Report (Data Summary) #3 – Quarter 2, 2020
Project Report Draft – Quarter 2, 2020

Technology Performance Reports include a performance metrics summary. A draft of the performance metrics table is included in the Section 9.

7.0 REPORTING REQUIREMENTS

In accordance with the FTA reporting requirements, set forth in FTA Circular 6100.1E, Transit Research and Technology Programs Chapter 2, Section 5, the project team will submit the following reports/ electronic documents on FTA's Transportation Electronic Award and Management (TrAMS) System.

- Quarterly Progress (Performance) Reports (QPRs) briefly highlighting progress toward project objectives and potential problems, as well as relevant technical reports within 30 days of the end of calendar quarter to the FTA Project manager. Federal Financial Reports (FFRs) and Milestones Progress Reports (MPRs) are submitted through TrAMS. In case there are unforeseen developments that may possibly delay the submission of a report, the FTA project Manager will be informed as soon as possible. These reports will conform to the seven reporting requirements in the FTA Circular 6100.1E.

- Financial Status Report or federal form SF269A, along with project invoices will be submitted through Delphi eInvoicing system for reimbursement.

- Since FTA is required by 49 U.S.C. Section 5312 (Funding Source) to evaluate every demonstration project within two years after award, an interim report at 2-year mark will be provided to the FTA project manager.

- A Final Technical Report, conforming the FTA Circular 6100.1E style and elements specs, as well as copies of relevant technical publications/electronic web-ready documents, in Section 508 compliance format, will be submitted to the FTA project manager. In addition, a hard copy of the Final Report will also be sent by mail.

8.0 FTA DOCUMENTS / REFERENCES

Project shall refer to the following for grant management and documentations:

Circular 6100.1E
https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/research-technical-assistance-and-training-program

FY17 Annual Certs and Assurances
https://www.transit.dot.gov/funding/grantee-resources/certifications-and-assurances/fta-fiscal-year-2017-certifications-and

FY17 Master Agreement
https://www.transit.dot.gov/funding/grantee-resources/sample-fta-agreements/changes-fta-master-agreement-fy-2017

All project applications for obligation, amendment and revision are electronic and should be done in TrAMS
https://www.transit.dot.gov/TrAMS/

Please refer to the following links in preparing a Final Report
https://www.transit.dot.gov/research-innovation/preparationinstructionsforftafinalreportsjune2013

Sample Final Reports
https://www.transit.dot.gov/research-innovation/research-innovation-reports-and-publications

Link below has general information about Delphi eInvoice System and training material
http://www.transportation.gov/cfo/delphi-einvoicing-system

See Evaluation and Data Requirements of NOFO (Section C4a) for additional information on Performance Metrics
https://www.transit.dot.gov/research-innovation/safety-research-and-demonstration-program

9.0 PERFORMANCE METRICS

Performance metrics are established in order to measure the effectiveness of the collision avoidance and mitigation technology in an urban setting, and to determine if the project meets FTA SRD program goals and objectives.

The team will assess the effectiveness of the collision avoidance and mitigation systems by collecting and analyzing technical performance data during the 18-month demonstration. The metrics that will be tracked during the demonstration are shown in the Performance Metric Summary table below. These metrics allow the team to judge the Safety Improvement, return on Investment, and Commercialization Potential of the collision avoidance and mitigation

technology. The results of the team's assessment can be used by LA Metro and the general transit industry when making decisions to adopt and deploy similar technology in other locations and applications. The project has the potential to identify technology that can deliver long-term human safety, cost reduction, operation up time, and public relation benefits to both transit operators and transit users. Furthermore, the impact that this project can make to the transit industry is amplified because the project team includes New Flyer. As a leading transit bus provider to the North American market, New Flyer has substantial impact on the availability and adoption of new transit bus technologies. By being involved in the project, New Flyer will have the opportunity to review system performance first-hand and more quickly make commercial decisions about advanced collision avoidance and mitigation technology.

In order to effectively track the performance metrics shown in the Performance Metrics Summary table, the team will utilize a variety of data collection and feedback tools. Describing these tools in detail are not possible at this time because it requires a detailed understanding of the data capture and communication capabilities of the specific systems that are to be used during the demonstration, which will not be identified until Task 1 is complete. However, regardless of what systems are selected for demonstration, all of the quantitative (e.g. number of collisions reduced) and qualitative (e.g. survey of drivers for opinion on tactile/audible/visual system feedback) metrics outlined in the summary table will be tracked during the demonstration. Ultimately, these are the metrics that will allow the team to assess the Safety Improvement, Return on Investment, and Commercialization Potential of the collision avoidance and mitigation technology.

NOTE: In order to achieve a comprehensive understanding of the impacts and implications of each proposed SRD demonstration, FTA or its designated independent evaluator, may require direct access to project data. These data will be used by FTA to conduct program evaluation during the execution and at the end of the project. Regardless of the FTA's independent evaluation, LA Metro will perform the project evaluation and complete the analysis using the metrics outlined in this section.

In addition to measuring the effectiveness of the collision avoidance and mitigation systems, the team intends to address FTA SRD program goals and objectives, outlined below.

SRD Program Objective 1: Explore advanced technologies to prevent transit vehicle collisions.

> The demonstration phase of the project explores the effectiveness of a collision avoidance system in an urban transit system environment. While not necessarily designed nor optimized for such an operating environment, the demonstration will assess the effectiveness of the system(s) and offer the opportunity to suggest modifications to the technology provider to improve performance for the transit industry.

SRD Program Objective 2: Enhance safety of transit services by incorporating safer design elements.

> New Flyer's interest in this project stems largely from their desire to offer a collision avoidance system as an option on their buses, incorporating safer design elements. This

commitment will eliminate the need for transit agencies to purchase and install the system as an after-market solution.

SRD Program Objective 3: Evaluate cost-effectiveness and practicability of potential solutions.

The project includes an assessment of the return on investment to be realized by the transit agency as well as a qualitative assessment of transit personnel's experience with the technology. The return on investment assessment will help determine the cost-effectiveness of the system(s). The qualitative assessment will help the team understand the practicality of the system(s) in daily operation. From an OEM perspective, New Flyer will be able to optimize the integration of the collision avoidance system with other critical bus systems such as braking and driver information systems to achieve the highest level of performance in terms of human driver assistance and public safety benefits at a commercially effective cost.

Performance Metric Summary table:

	Safety Improvement							
Metric	# and Type of Incident (experiment group)	# and Type of Incident (control group)	# and Type of Incident (historical occurrences)	% collision reduction	% collision reduction w/ pedestrians	% collision reduction w/ bicyclists	% collision reduction w/ motorized vehicles	# of false positives
Instrument Used	TransitSafe (event database)	TransitSafe (event database)	TransitSafe (event database)	statistical analysis	statistical analysis	statistical analysis	statistical analysis	TransitSafe (event database)
Frequency	once per shift throughout demo	once per shift throughout demo	once per shift throughout demo	every 6-months throughout demo	every 6-months throughout demo	every 6-months throughout demo	every 6-months throughout demo	once per shift throughout demo

	Commercialization Potential			ROI*
Metric	Driver Opinion	Maintenance Staff Opinion	Public Stakeholder Opinion	TBD (e.g. 1 year, 6 year, 12 year)
Instrument Used	survey	survey	survey	data from demo, historical data, and cost estimates
Frequency	every 6-months throughout demo	every 6-months throughout demo	every 6-months throughout demo	once during project

* ROI will be calculated using production-level component and installation cost estimates, data from the technology demonstration, and historical transit industry collision data. Furthermore, the ROI period has not yet been determined but will be defined by stakeholders before the data collection and reporting tasks begin.

10.0 KEY PERSONNEL

Michael Chang previously designed agricultural & industrial components at John Deere and developed servo-controlled actuators for aerospace products at Textron and ITT. He joined LA Metro in 2000 and has been serving as lead engineer on major bus procurements. They included (370) 40-foot buses, (200) 60-foot articulated buses and (301) 45-foot composite-body buses from NABI. In the last five years, he successfully introduced to LA Metro a fleet of (900) 40-foot Xcelsior buses built by New Flyer. He received a master's in Mechanical Engineering from the University of Iowa and has been a registered Professional Engineer in Iowa and California. For six years starting in 2000, he sat on the Hearing Board of the Southern California Air Quality Management District as an alternate engineer member.

Diego Ramirez is a Manager Transportation Planner, at Los Angeles County Metropolitan Transportation Authority since 2008. Responsible for management, compliance oversight and reporting for select FTA grant awarded funds under Section 5316 and Section 5317 to sub-recipients. Collectively these grants total over $39 million and were awarded either through TEAM or TrAMS from the FTA grants systems. Prior to Metro he was involved in oversight for commercial and private real estate loans through Wachovia Bank N.A.

Thomas Small, is a Professional Engineer and a graduate of the University of Manitoba Faculty of Engineering (1994). He started his mechanical engineering career in agricultural equipment at New Holland Canada (now Buhler Versatile) in Winnipeg testing and designing tractors for agricultural applications.

In 2000, Mr. Small moved to the Winnipeg-based transit bus manufacturer, New Flyer Industries. In this fast-paced environment, he progressed through the Production Engineering Department to the New Product Development Department where he managed multiple large scale projects with emphasis on advancing powertrain technology over 11 years as a Project Engineer. Since 2012, Mr. Small manages a high performance team of engineers and technicians as the Director of the New Product Development Department overseeing the development of large scale emerging technology projects such as Battery Electric buses, Fuel Cells, and now stages of autonomous vehicle development.

Blake Whitson is a Technical Project Manager at CTE. Mr. Whitson provides management support for advanced transportation projects, including battery-electric and hydrogen fuel cell powered vehicle deployments. He also performs route analysis, vehicle modeling and simulation, and rate modeling activities to determine the feasibility of alternate fuel vehicles for client applications. Other responsibilities at CTE include estimating energy consumption and charging costs for bus deployment projects and conducting Buy America compliance assessments for transit bus procurement projects. Prior to CTE, Mr. Whitson was an Advanced Manufacturing Engineer at BorgWarner. He holds a Bachelor of Science in Mechanical Engineering from Clemson University.

ATTACHMENT C

DEOD SUMMARY

DEMONSTRATION OF COLLISION AVOIDANCE TECHNOLOGY / PS111340000

A. Small Business Participation

New Flyer of America, Inc. (New Flyer) is a Transit Vehicle Manufacturer (TVM) and is on the Federal Transit Administration's (FTA) list of eligible TVMs. New Flyer reported that it submitted its overall Disadvantaged Business Enterprise (DBE) goal of 4.20% to FTA for FY18, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goals and report participation directly to FTA annually.

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. Rolling stock solicitations are not one of the covered contract types in Metro's Living Wage and Service Contract Worker Retention Policy.

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 (PLA/CCP) 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.

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

File #: 2018-0483, **File Type:** Contract **Agenda Number:** 24.

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018**

SUBJECT: DOOR ENABLE SYSTEM (CORRECT SIDE DOOR OPENING PROJECT)

ACTION: APPROVE USE OF DESIGN-BUILD CONTRACT DELIVERY METHOD

RECOMMENDATION

CONSIDER:

A. FINDING that awarding a design-build contract pursuant to Public Utilities Code Section 130242(b) will achieve for Metro certain private sector efficiencies through the integration of design, project work and components at Metro rail facilities and in Metro light rail vehicles in Los Angeles County as defined by the project listed in Attachment A. Approval requires a two-thirds affirmative vote;

B. ADOPTING the use of the design-build process pursuant to Public Utilities Code Section 130242 et seq. will result in a reduction in project costs and expedite project completion. Approval requires a two-thirds affirmative vote; and

C. AUTHORIZING the Chief Executive Officer to solicit a design-build contract for design and construction of the project listed in Attachment A pursuant to Public Utilities Code Section 130242 (a), (c), (d) and (e).

ISSUE

Metro is authorized to enter into design-build contracts pursuant to Public Utilities Code Section 130242. Recommendation A requires Board approval.

Public Utilities Code Section 130242 et seq. allows for the negotiation and award of a design-build contract to a responsible proposer whose proposal is determined to be the best value to Metro. Recommendation B requires Board approval.

BACKGROUND

The Door Enable System (Correct Side Door Opening) Project on LRT (CP 214002) is a light rail line safety improvement project for the Blue, Gold, and Expo Lines. The scope of the project is to install a

vital safety system to automatically detect the side of a platform that is immediately adjacent to a stopped train and open the train doors only on that side, thus preventing unintended opening of doors on the non-platform side or “wrong side” of a station. Additionally, this safety system will preclude an operator from opening a train’s doors if the train is not properly berthed at a station (i.e. when one or more bank of doors is off the platform) Currently, Metro (with the exception of the Green Line and the future Crenshaw Line) uses a system that is dependent on train operators opening the doors on the correct side. This project will deploy a vital feature such that light rail vehicle doors will only be enabled to open when properly aligned with the correct side of station platforms. This system will also satisfy an additional objective in providing foundational technology structure to ensure proper vehicle berth and switching of radio channels. Metro is working with our State Safety Oversight agency - the California Public Utilities Commission (CPUC) to implement an enhanced safety system under this project.

DISCUSSION

Design-build is a method of project delivery through which the project owner contracts directly with a single entity that is responsible for both design and subsequent construction services for the stated project. Metro has successfully utilized design-build contracts on various projects in its capital program. Staff seeks suitable opportunities to utilize the design-build delivery method for current and future capital program projects. The design-build approach offers a number of benefits:

- A single point of responsibility for design, installation, and construction.
- Staff project development resources are limited so more budgeted projects can be accomplished by adding design/build capacity.
- Risk for design is shifted to the design/build contractor; therefore, changes related to design are minimized.
- Schedule efficiency and significant time savings can be achieved because construction can proceed while design is being finalized.
- Administrative costs can be saved due to combining the solicitation process with design and construction; save construction management and engineering resources during the construction phase; and minimize contractor-generated changes resulting in a reduced contract closeout time.
- More competition can be obtained during the procurement process.

The project described in Attachment A will benefit from the design-build approach and pertinent elements of the project are as follows:

- The project described in Attachment A will benefit from the design-build approach and pertinent elements of the project are as follows: It is safety-driven - the project will enhance safe operations of Metro’ light rail vehicles;
- It will be implemented on the Blue, Gold and EXPO Lines;
- A single vendor will assure a well-coordinated design with the subsequent installation of a technologically driven system;

- Metro will achieve efficiency in procurement, design and installation time. Only one procurement process will be required as opposed to two; and
- Metro will mitigate other administrative, engineering and construction management costs that are customary utilizing design-build method of project delivery.

The contract will be awarded to the responsive, responsible bidder determined to be the best value to Metro meeting the criteria set forth in the invitation for bids.

DETERMINATION OF SAFETY IMPACT

The recommended action of a design-build delivery method will improve the implementation of this safety enhancement project and enhance Metro's ability to provide service that is safe and reliable.

FINANCIAL IMPACT

There is no financial impact resulting from this action. Funds for the project are included in the FY19 budget under project number 214002 Correct Door Enable on LRT. Since this is a multi-year project, the Project Manager will ensure that the balance of Life of Project (LOP) funds is budgeted in future years.

Impact to Budget

The current source of funds for this project is Prop A 35%. This funding source maximizes allowable project fund allocations given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: 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 fulfilment of this project could be accomplished through separately procured design and construction contracts or through a design prepared by Metro staff followed by a traditionally procured construction contract. For this project, staff does not recommend this approach. Staff asserts that there are distinct advantages to Metro in having a single contracted firm responsible for all design, installation, construction and testing. There are achievable cost savings to Metro by mitigating or minimizing certain project management, administration and coordination costs, a significant cost reduction in contracting and reduction in the overall project schedule. Additionally, assurance of quality and reliable functionally of a technologically advanced system is significantly raised when a single contractor is responsible for its own design and installation.

NEXT STEPS

Design-build contract solicitation and award for the project will be pursued in FY 19.

ATTACHMENTS

Attachment A - Correct Side Door Opening Project Scope of Work

Prepared by: Geyner Paz, Sr. Admin Analyst, Rail MOW, (213)617-6251
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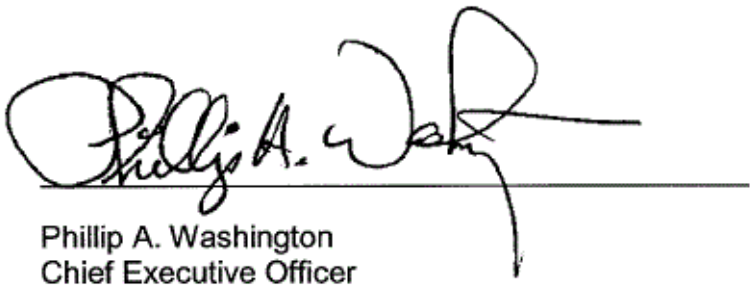
Errol Taylor, Sr. EO Rail Maintenance and Engineering, (213)922-3227

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108
Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051
Greg Kildare, Chief Risk, Safety & Asset Management Officer, (213)922-4971



Phillip A. Washington
Chief Executive Officer

Attachment A

Correct Side Door Opening - Project Scope of Work

The following is a restatement of the current general scope of work for the Correct Side Door Opening project (System).

The Los Angeles County Transportation Authority (Metro) has initiated an effort to study, develop, and implement a safety enhancement for all its operating light rail vehicles (LRVs), with emphasis toward rehabilitating the existing lines. Metro is seeking to deploy a feature such that LRV doors can only be opened when properly aligned with the correct side of station platforms. This System shall be designed, constructed, and installed to operate on the Blue, Gold, and Expo Lines.

Metro seeks to obtain a vital solution for two safety-related functional objectives and two supplemental operational objectives achieved through a single operational system when designed, constructed, and implemented. Once the System is operational, it will:

- (1) Ensure that Metro's operating LRVs are one properly berthed, i.e., aligned, at station platforms;
- (2) Prevent doors on an LRV from opening in an unsafe condition unless intentionally overridden;
- (3) Alert the train operator to change radio channels when appropriate; and
- (4) Provide Ready to Dispatch prompts to the operator.

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

File #: 2018-0486, **File Type:** Contract **Agenda Number:** 25.

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018**

SUBJECT: A650-2015, HEAVY RAIL VEHICLE OVERHAUL AND CRITICAL COMPONENT REPLACEMENT PROGRAM

ACTION: APPROVE CONTRACT AMENDMENT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute Contract Modification No. 2 to Contract No. A650 -2015, with Talgo Inc. for the Heavy Rail Vehicle Overhaul and Critical Component Replacement Program (OCCRP), for the design and installation of an on-board Mist Fire Suppression System (MFSS) on 74 A650 Heavy Rail Vehicles (HRV) in the firm-fixed price amount of $10,355,000 for a total contract value not-to-exceed $83,325,494. The inclusion of the MFSS into the OCCRP will extend the period of performance by eight months.

ISSUE

Metro places a high priority on the safety of our customers, the public and our employees. To that extent, there has been a constant focus on taking proactive measures to maintain our infrastructure and seek out innovative approaches to prevent casualties on our rail system. Underground tunnel fires are extremely dangerous to human health and safety because smoke accumulates very quickly in such a confined space. The severity of an underground fire is demonstrated by the Daegu subway fire in which an arsonist set fire to a train stopped at a station of the Daegu Metropolitan Subway in Daegu, South Korea. The fire occurred on February 18, 2003, and killed 192 people, while injuring another 151 people. Hence, there is a need to improve fire suppression technology industry-wide to mitigate against such consequences.

BACKGROUND

The Metro Red Line, which opened in January 1993, was designed to the latest standards available in the 1980's and early 1990's. The design includes ventilation zones to help exhaust smoke that may accumulate in the event of fires in the tunnels. Given the planned service expansions, these existing measures may not be sufficient in the future to keep up with the expected smoke accumulation in the context of an accelerated fire. This is not an issue on the light rail tunnels as those lines opened later and were designed to more current standards.

DISCUSSION

To mitigate this issue, staff proposes adding MFSS to the vehicles that will be operating in the heavy rail lines. The use of such a system is intended to protect life and property from an on-board fire within the passenger compartment. The protection goal of the MFSS is to quickly and reliably suppress the spread of the occurrence of the fire condition through containment and prevention of a buildup of smoke and heat; affording protection to occupants, minimizing vehicle damage, and maintaining a tenable environment.

If the Contract Modification is approved, Talgo Inc. will integrate a service proven MFSS on the newest 74 A60 heavy rail vehicles currently undergoing a modernization effort.

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 2.61% DBE goal under the FTA TVM goal.

DETERMINATION OF SAFETY IMPACT

The approval of the Contract Modification will have a direct and positive impact to fire safety, system safety, service quality, system reliability, maintainability and overall customer satisfaction.

FINANCIAL IMPACT

The approved Capital LOP for HRV Midlife Overhauls (project 206038) is $86,662,000. It includes budget for the base contract and requested contract modification. The base contract is $72,970,494 and the requested contract modification is $10,355,000. The revised contract value is $83,325,494.

Funding of $17,490,000 for this action is included in the FY19 budget in cost center 3043 - Rail Vehicle Acquisition, Account 50308 - Service Contract Maintenance, project 206038 - Heavy Rail Vehicle Midlife.

Since this is a multi-year contract, the cost center Manager, Project Manager, and Senior Executive Officer, Vehicle Acquisition will be responsible for ensuring that Project costs are budgeted in future fiscal years.

Impact to Budget

The current funding source for this action is Federal 5337 SGR and TDA Article 4. Staff is actively pursuing additional Federal, state, and Local funding as it becomes available.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

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

Metro staff has reviewed various technologies deployed by qualified and mature manufacturers delivering successful on-board MFSS. The types of retardant materials these manufacturers utilized for its fire suppression systems for vehicles included, foam additives, powder, aerosol gas mixtures, gaseous extinguishing agents, water mist, and etc. Each of these materials was reviewed and analyzed as to its application and efficacy for interior and exterior type fire suppression, for impacting the health of passengers, and for the potential to compromise the safety of passengers. It should be noted that the primary objective of the on-board MFSS is to detect and suppress a vehicle's interior fire at the source, and provide tenable conditions for the passengers to reach a station stop and evacuate the vehicle.

Metro staff also reviewed the Metro Consultant studies, including their conclusions and recommendations on the performance of an on-board MFSS, and evaluated Industry Best Practices, standards and regulatory requirements.

Staff's findings determined that there were no current US standards on this subject matter. However, in the international arena, Western Europe had successfully implemented this type of system on its rolling stock and promulgated a number of standards for determining deployment of systems for this firefighting activity. The European authorities have issued a series of automatic fire detection and fighting systems fire codes and standards for rolling stock and guidelines including SI Loco & Pas 2014, EN 50553, EN 45545, ARGE Guidelines and UNI 11565 for both in the US. The majority of the on-board MFSS systems utilized water mist as the primary retardant methodology for the vehicles' interior portion, compliant with the regulatory requirements and international best practices.

Staff has confirmed that all other technologies employing the other forms of retardants are not suitable for use in an enclosed transit vehicle environment because of the potential of adverse health impacts to passengers A water-based suppression system will not harm passengers, and is considered the safest extinguishing medium for an interior transit vehicle fire.

Based upon the aforementioned, Metro staff has determined that the best course of action is to use a "service proven technology" approach as implemented by the European manufacturers and to have a water-based MFSS installed as part of the ongoing A650 vehicle overhaul project.

The Board may choose not to approve the Contract Modification. However, this alternative is not recommended. Currently, Metro's HRVs do not contain active fire suppression mechanisms.

NEXT STEPS

Upon Board approval, the Modification No. 2 to Contract No. A650-2015 will be exercised with Talgo, Inc.

ATTACHMENTS

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

Prepared by: Andrew Kimani, Senior Project Control Manager, (213) 922-3221
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Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

HEAVY RAIL VEHICLE OVERHAUL AND CRITICAL COMPONENT REPLACEMENT PROGRAM/A650-2015

1.	**Contract Number**: A650-2015			
2.	**Contractor**: Talgo, Inc.			
3.	**Mod. Work Description**: Add Mist Fire Suppression System to Overhaul Program			
4.	**Contract Work Description**: Overhaul A650 Heavy Rail Vehicles			
5.	**The following data is current as of**: 8.10.18			
6.	**Contract Completion Status**		**Financial Status**	
	Contract Awarded:	10.5.16	**Contract Award Amount:**	$54,698,676
	Notice to Proceed (NTP):	01.16.17	**Total of Modifications Approved:**	$18,271,818
	Original Complete Date:	11.16.19	**Pending Modifications (including this action):**	$10,355,000
	Current Est. Complete Date:	05.16.22	**Current Contract Value (with this action):**	$83,325,494
7.	**Contract Administrator**: Wayne Okubo		**Telephone Number**: (213) 922-7466	
8.	**Project Manager**: Andrew Kimani		**Telephone Number**: (213)922-3221	

A. Procurement Background

This Board Action is to approve Contract Modification No. 2 issued in support of the addition of an onboard Mist Fire Suppression System (MFSS) on 74 A650 Heavy Rail Vehicle (HRV) as part of the overhaul and critical component replacement program on the Option Buy A650 consisting of 37 married pairs.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a firm fixed unit price.

On September 22, 2016, Metro's Board of Directors approved Board Agenda Item No. 37 to Talgo, Inc. in the amount of $54,698,676 for the overhaul of 38 A650 Heavy Rail Vehicles, with the option to overhaul the remaining 36 vehicles of the newest A650 fleet. The intent of this overhaul program is to replace vital systems and components and update relevant technology to ensure the continued safety, reliability, availability, and maintainability of the fleet for full revenue service and maintain the fleet's State of Good Repair.

The recommended Contract Modification is to include the onboard MFSS to the A650 overhaul program currently underway by Talgo. The addition of the MFSS has

merit as this new and innovative safety feature complements the intent of the overhaul program by incorporating updated technology to ensure continued safety of the A650 fleet.

B. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon cost analysis, an independent cost estimate, technical evaluation, fact finding, and negotiations.

Proposal Amount	Metro ICE	Negotiated Amount
$12,093,482	$7,355,436	**$10,355,000**

The difference between the Metro ICE and the Negotiated Amount is attributed to four factors not fully considered in the ICE; project risk, schedule, logistics, and equipment and materials.

Risk: The MFSS technology is a safety system that is limited in use, and has never been implemented onto a HRV platform in the US. Talgo will install the first system built to US standards.

Schedule: The integration of the MFSS into the A650 overhaul will extend the project by eight months. The schedule extension was not considered in the Metro ICE.

Logistics: The system and component manufacturers of the MFSS are European, primarily designed and manufactured in Italy and Germany. The logistical considerations for coordinating project reviews, inspections, and tests, were not included in the Metro ICE.

Equipment and Materials: The majority of the system and components are designed and built to European standards. Certification to US federal standards, including Buy America, will require additional effort and cost.

ATTACHMENT B

CONTRACT MODIFICATION/CHANGE ORDER LOG

HEAVY RAIL VEHICLE OVERHAUL AND CRITICAL COMPONENT REPLACEMENT PROGRAM/A650-2015

Mod. no.	Description	Status (approved or pending)	Date	$ Amount
1	Exercise Option to overhaul 18 additional A650 HRV married pairs	Approved	10.26.17	$18,271,818
2	**Add MFSS to A650 HRV OCCRP**	**Pending**	**09.28.18**	**$10,355,000**
	Modification Total:			**$28,626,818**
	Original Contract:			$54,698,676
	Total:			**$83,325,494**

ATTACHMENT C - Funds Uses and Sources Tables

	From Inception to Date (ITD) thru FY16 Jun	7/1/16 - 6/30/17	7/1/17 - 6/30/18	7/1/18 - 6/30/19	7/1/19 - 6/30/20	7/1/20 - 6/30/21	7/1/21 - 6/30/22		
Use of Funds		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Total**	**% of Project**
Overhaul 38 Option-Buy Vehicles	$0	$7,925,747	$1,920,702	$20,189,568	$19,985,362	$3,827,858	$849,440	$54,698,676	83.2%
Professional Services	$798,715	$265,954	$980,667	$990,667	$1,000,667	$659,645	$0	$4,696,314	7.1%
MTA Administration	$722,000	$377,903	$420,000	$475,000	$542,000	$310,382	$0	$2,847,285	4.3%
Contingency	$0	$0	$0	$0	$0	$0	$3,490,864	$3,490,864	5.3%
38 Option Vehicle Summary	***$1,520,715***	***$8,569,604***	***$3,321,368***	***$21,655,235***	***$21,528,029***	***$4,797,885***	***$4,340,304***	***$65,733,139***	***100.0%***
Overhaul 36 Option Vehicles	$0	$0	$4,624,856	$1,240,633	$0	$10,338,548	$2,067,781	$18,271,818	87.3%
Professional Services (Increase Requested)	$0	$0	$0	$0	$0	$498,318	$98,920	$597,238	2.9%
MTA Administration (Increase Requested)	$0	$0	$0	$0	$0	$364,755	$72,407	$437,162	2.1%
Contingency (Increase Requested)	$0	$0	$0	$0	$0	$0	$1,622,643	$1,622,643	7.8%
Option Order Summary	***$0***	***$0***	***$4,624,856***	***$1,240,633***	***$0***	***$11,201,622***	***$3,861,750***	***$20,928,861***	***100.0%***
Overhaul 74 Option-Buy Vehicles	$0	$7,925,747	$6,545,557	$21,430,201	$19,985,362	$14,166,406	$2,917,221	$72,970,494	84%
Professional Services	$798,715	$265,954	$980,667	$990,667	$1,000,667	$1,157,963	$98,920	$5,293,552	6%
MTA Administration	$722,000	$377,903	$420,000	$475,000	$542,000	$675,137	$72,407	$3,284,447	4%
Contingency	$0	$0	$0	$0	$0	$0	$5,113,507	$5,113,507	6%
Total Order Summary Total	***$1,520,715***	***$8,569,604***	***$7,946,224***	***$22,895,867***	***$21,528,029***	***$15,999,507***	***$8,202,054***	***$86,662,000***	***100.0%***
Sources of Funds		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY21**	**Total Sources**	**%**
Measure R 2% (206038)	$1,520,715	$0	$0	$0	$0	$0	$0	$1,520,715	1.8%
PropA 35% Bonds/Cash		$8,569,604	$7,946,224	$22,895,867	$0	$0	$0	$39,411,695	45.5%
Cap and Trade; Other State & Federal sources (206038)*					$21,528,029	$15,999,507	$8,202,054	$45,729,590	52.8%
**** Future Local, State & Federal Funds to be identified as they become avalaible.***									
Total Funding Sources	***$1,520,715***	***$8,569,604***	***$7,946,224***	***$22,895,867***	***$21,528,029***	***$15,999,507***	***$8,202,054***	***$86,662,000***	***100.0%***

* Staff will pursue additional funding sources to supplement Project 206038 budget which may become available through MAP-21 or other federal sources for this project and also utilize other State and Local funding sources as opportunities arise such as Cap and Trade or other new sources.

DEOD SUMMARY

HEAVY RAIL VEHICLE OVERHAUL AND CRITICAL COMPONENT REPLACEMENT PROGRAM / A650-2015

A. Small Business Participation

Talgo Inc. is a Transit Vehicle Manufacturer (TVM) and is on the Federal Transit Administration's (FTA) list of eligible TVMs. Talgo Inc. reported that it submitted its overall Disadvantaged Business Enterprise (DBE) goal of 2.61% to FTA for Federal Fiscal Year 2018, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goals and report participation directly to FTA annually.

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. Rolling stock solicitations are not one of the covered contract types in Metro's Living Wage and Service Contract Worker Retention Policy.

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 (PLA/CCP) 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. Local Employment Plan Program

Local Employment Plan (LEP) Program is applicable on this Contract. Staff will be monitoring progress on all LEP commitments, including the contractual commitments in creating employment opportunities in Los Angeles County and the 10% commitment to hire disadvantaged workers.

Local Employment Plan Commitment:

LEP Commitment for Base + All Options	$2,212,675
LEP Actuals to Date	$0.00
Balance of LEP to be attained	$2,212,675
Disadvantaged Workers attainment	$0.00

The manufacturer Local Employment Plan identifies that the LEP achievements and Disadvantaged Worker participation will commence in the assembly stage of the Contract.

File #: 2018-0489, **File Type:** Contract **Agenda Number:** 26.

OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: P3010, LIGHT RAIL VEHICLE PROCUREMENT CONTRACT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

APRROVE Modification No. 36 to Contract No. P3010 with Kinkisharyo International LLC to reduce the existing 100% performance bond requirements for Contract deliverables to realize a project savings of $4,386,957, decreasing the total Contract value from $926,142,679 to $921,755,722. The Contract decrease does not affect the Life of Project Budget.

ISSUE

As of July 31, 2018, Kinkisharyo International (KI) has successfully delivered 140 out of the 235 P3010 LRVs under Contract, and has satisfied the delivery requirements for the Base Contract and its first two exercised Contract Options. KI's rate of vehicle delivery puts them in position to deliver all Contract LRVs in advance of the Contract completion date of December 2020. The P3010 LRV project is currently meeting its program goals and project schedule.

Maintaining a 100% performance bond is excessive in light of KI's proven performance and is not commensurate with the value of the open obligations remaining on the P3010 Contract. Replacing the existing 100% performance bond with a $50 million Irrevocable Letter of Credit (LOC), in combination with existing contractual warranties and securities, provide Metro with an adequate level of financial security to meet the open obligations remaining on the P3010 Contract. This approach will offer a savings to Metro by decreasing the total Contract value by $4,386,957. This savings will be applied as a LOP contingency to cover future contract changes for vehicle enhancements.

BACKGROUND

In October 2010, the Metro Board approved a new solicitation for 235 LRVs to meet Metro's projected Transit Rail Line requirements. In order to ensure on-time performance of the new LRV program to meet vehicle requirements for new rail lines in construction, the Board's solicitation approval included a 100% performance bonding requirement.

DISCUSSION

While a 100% performance bonding security was commensurate with the level of risk Metro faced at

that time of the procurement and award in 2012, such a high level of contract performance security is excessive in light of KI's proven performance. Thus far KI has performed adequately to meet Metro's rail car needs and was instrumental in ensuring that Metro had the vehicle resources to open two new transit lines; the Foothill and Expo Extensions.

Therefore, staff recommends reducing the contractual performance bonding requirement of 100% of the value of the P3010 Light Rail Vehicle (LRV) Contract. The reduction in performance bonding can be accomplished without negatively impacting the financial security and program incentives that Metro holds to ensure project completion of the P3010 LRV program, and this action will save $4.38 million in the cost to the project. There will be no change to the LOP. The savings will be applied as a LOP contingency to cover future changes to enhance vehicle safety and performance, and passenger comfort. Specifically, staff recommends replacing the existing 100% performance bond with a $50 million Irrevocable Letter of Credit (LOC). This supplements other financial security measures:

- Metro holds a 5% Contract retention through the completion of the project. Metro currently holds $48 million; that cash retention will grow to $69 million by the end of the project, and
- There is an existing LOC equal to 6% of the Contract value for warranty services through 2023.

The recommended changes to the Contract's requirements provide Metro with an adequate level of financial security to meet the open obligations remaining on the P3010 Contract.

DETERMINATION OF SAFETY IMPACT

This board action will not have an impact to safety, vehicle performance or passenger experience.

FINANCIAL IMPACT

Adoption of the recommendation to approve the Contract Modification will provide a savings to Metro by decreasing the contract price by $4,386,957; from $926,142,679 to $921,755,722. This amount does not affect the P3010 project LOP of $972,000,000. Funding for this project are included in the FY19 budget in Cost Center 3043 - Strategic Vehicle and Infrastructure Delivery, Account 53105 - Acquisition of Revenue Vehicle, Project 206035 - P3010 LRV Project including options.

Impact to Budget
The current source of funds for this action is Measure R, Federal STIP, and Proposition A 35%. These funding sources maximize allowable project fund allocation given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. 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

Should the Board choose not to approve staff's recommendation for the Contract Modification recommended above, Metro would not realize a project savings of $4.38 million. This alternative is not recommended because a 100% performance bond on the existing mature project will not provide any additional financial security that is not already available through existing Contract retention, Final Acceptance Milestones payments held and a Letter of Credit that would secure and incentivize project completion.

NEXT STEPS

Upon Board approval, staff will execute Contract Modification No. 34, proceed with implementation of the changes outlined above, and continue delivery of the P3010 option order vehicles.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Contract Modification Authority (CMA) Summary
Attachment C - DEOD Summary

Prepared by: Victor Ramirez, Deputy Executive Officer, Contract Administration, (213) 922-1059
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Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

P3010 LIGHT RAIL VEHICLE PERFORMANCE BONDING/CONTRACT P3010

1.	**Contract Number**: P3010			
2.	**Contractor**: Kinkisharyo International LLC			
3.	**Mod. Work Description**: The Contractor shall eliminate the existing 100% performance bond and replace it with a $50 million Irrevocable Letter of Credit.			
4.	**Contract Work Description**: New Light Rail Vehicles			
5.	**The following data is current as of**: 8/7/18			
6.	**Contract Completion Status**		**Financial Status**	
	Contract Awarded:	4/20/2012	**Contract Award Amount:**	$890,142,275, inclusive of Options 1 through 4.
	Notice to Proceed (NTP):	8/2012	**Total of Modifications Approved:**	35
	Original Complete Date:	2/2017 (Base only)	**Pending Modifications (including this action):**	1
	Current Est. Complete Date:	01/2021 (including Options)	**Current Contract Value (with this action):**	$921,755,722
7.	**Contract Administrator**: Wayne Okubo		**Telephone Number**: (213) 922-7466	
8.	**Project Manager**: Jason Yaw		**Telephone Number**: (213) 922-3325	

A. Procurement Background

This Board Action is to approve Contract Modification No. 36 to Contract No. P3010 for the elimination of the 100% performance bond requirement defined in the P3010 Contract. The 100% performance bond would be replaced by a $50,000,000 Irrevocable Letter of Credit (LOC).

This Contract Modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a firm fixed price.

In April 2012, Contract No. P3010 was awarded to Kinkisharyo International LLC (KI) in the firm fixed price amount of $299,061,827 for the manufacturing and delivery of 78 light rail vehicles (LRV) for the base contract buy. The Board also authorized the CEO to negotiate and award up to four Contract Options totaling $591,080,448 for up to 157 additional LRVs. These four options were executed on August 14, 2013 (Option 1 and 4) and July 31, 2015 (Option 2 and 3).

This Contract Modification is to enable KI to remove their responsibility to maintain a 100% performance bond with a responsible surety. In lieu of a performance bond, staff recommends the acceptance of a LOC from a financially responsible institution in the amount of $50 million. In addition to the LOC, Metro currently holds cash retention of $48 million and by the end of the Contract period of performance the retention would equal $69 million in cash holdings. Metro staff recommends that the combination of LOC and cash retention is adequate to incentivize and protect the timely and full completion of the P3010 project.

B. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon cost analysis and financial risk assessment.

Proposal Amount	Metro ICE	Negotiated Amount
($4,386,957)	($3,500,000)	($4,386,957)

ATTACHMENT B

CONTRACT MODIFICATION AUTHORITY (CMA) SUMMARY

P3010 LIGHT RAIL VEHICLE PERFORMANCE BONDING/CONTRACT P3010

Contract Modification No.	Description	Status	Estimated Cost	
N/A	Award Base Contract	Approved	$	299,061,827.00
1	Modify SP-27 US Employment Plan, Section B – New FTE Positions	Executed	$	0.00
2	Exercise Contract Option No. 1 for $104,428,419 and Option No. 4 for $261,893,225 and Period of Performance	Executed	$	366,321,644.00
3	Revise Period of Performance to include 30 days retooling period after delivery of last car on prior order	Executed	$	0.00
4	Modify applicable commercial Specs and Technical Specs for Request for Change No. 9 LED on Recording Cameras. Increase Contract Amount for the Base Buy by $120,362.19	Executed	$	120,362.19
5	Modify Applicable Commercial Specs and Technical Specs for Request for Change No.10 - Door Close Operator Alert. Increase Contract Amount for the Base Buy by $74,763.06	Executed	$	74,763.06
6	Modify Applicable Commercial Specs and Technical Specs for Request for Change No.11 Train Operator Log In. Increase Contract Amount for the Base Buy by $253,955.52	Executed	$	253,955.52
7	Modify Applicable Commercial and Technical specs for RFC No. 14 for revising car number to four digits	Executed	$	0.00
8	Modify Applicable Commercial and Technical specs for RFC No. 1 for the addition of a backup train operator display	Executed	$	861,695.00
9	Modify Applicable Commercial and Technical specs for RFC No. 8 Location for Emergency Tool Enclosures	Executed	$	0.00
10	Deleted	Not Executed	$	0.00
11	Exterior Rear View Mirrors	Executed	$	677,317.00
12	Sandbox Location	Executed	$	548,242.00
13	RFC No. 13 - Adding Graphic Display	Executed	$	355,848.00
14	Revised Invoice Procedures	Executed	$	0.00
15	RFC No. 2 - Exterior route signs with color ID	Executed	$	1,206,791.85

16	RFC No. 6 - Interior Route Information Signs	Executed	$	1,274,944.00
17	Escalation Increase in accordance with CP-09 entitled "Option Prices and Adjustment" for Option 1 and Option 4	Executed	$	6,534,165.00
18	Exercise of Contract Options 2 and 3	Executed	$	224,758,804.00
19	Addition of Interior Route Information Signs – Design Change	Executed	$	169,146.38
20	Cab Console – Door Control	Executed	$	194,439.00
21	Vehicle Scale Model	Executed	$	(75,000.00)
22	Escalation Increase in accordance with CP-09 entitled "Option Prices and Adjustment" for Option 2 and Option 3	Executed	$	11,651,376.00
23	Transport of three LRVS (No. 1003, 1014, and 1016)	Executed	$	30,647.00
24	Windshield wipers and brake cut out skirt openings	Executed	$	248,892.00
25	Revision of SP-04 entitled "Approved Subcontractors and Suppliers" list	Executed	$	0.00
26	Extension of Time Base Contract from 53 to 56 months	Executed	$	0.00
27	Transport of 19 railcars from Monrovia to Green Line	Executed	$	205,571.00
28	Modification of CP-02. Modification changes the percentage for the Conditional Acceptance and Final Acceptance Milestones	Executed	$	0.00
29	Crenshaw Line Tie-In Support	Executed	$	191,747.16
30	RFC #19 Reflective Labels for 78 Base LRV's	Executed	$	609,974.61
31	Award RFC No. 1 for Addition of Train Operator, RFC No. 2 for Color Route ID, RFC No. 3 for Addition of exterior rear view mirrors, and RFC No. 6 for Interior route information signs on 157 LRVs, Options 1-4	Executed	$	5,687,691.00
32	Award RFC #7 for Sandbox Relocation and RFC# 19 Reflective Labels, on 157 LRVs, Options 1-4	Executed	$	3,675,427.00
33	Award RFC #11 for Train Operator Log-In and RFC# 13 for Graphic Design at ADA and Priority Seats on 157 LRVs, Options 1-4	Executed	$	913,473.00
34	Award RFC #23 for Car Paint on 78 Base Order LRV's and RFC #24 for Brake Cut-Out Skirt Opening on 157	Executed	$	355,656.00

	LRVs, Options 1-4		
35	Award RFC #9 for LED's on Recording Camera's, RFC #10 for Door Close Operator, and RFC #22 for Windshield Wiper, on 157 LRV's, Options 1-4	Executed	$ 233,280.24
36	Replace existing 100% Performance Bond with a $50 million Irrevocable Letter of Credit	Recommended for Approval	$ (4,386,957.00)
	Subtotal – Negotiated and In Process Changes		$ 921,755,722.01
	Subtotal – Negotiated and Recommended for Approval		$ 0
	Subtotal – Negotiated but Not Executed, Recommended Approval for CEO to negotiate and execute (Pending)		$ (4,386,957.00)
	Total Estimated Modifications Including Pending Changes		$ 622,693,895.01
	Prior CMA Authorized by the Board (CMA 10% of aggregate amount of original award plus Options 1-4)		$ 89,014,227.10
	Increased CMA requested		$ 0.00
	Total CMA including this action		$ 13,427,906.01
	Remaining CMA for Future Changes		$ 75,586,321.09

DEOD SUMMARY

P3010 LIGHT RAIL VEHICLES PERFORMANCE BONDING/CONTRACT P3010

A. Small Business Participation

Kinkisharyo International, LLC. is a Transit Vehicle Manufacturer (TVM) and is on the Federal Transit Administration's (FTA) list of eligible TVMs. Kinkisharyo reported that it submitted its overall Disadvantaged Business Enterprise (DBE) goal of 2.30% to FTA for FY18, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goals and report participation directly to FTA annually.

Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract. Rolling stock solicitations are not one of the covered contract types in Metro's Living Wage and Service Contract Worker Retention Policy.

B. Prevailing Wage Applicability

Prevailing wage is not applicable to the manufacturing of light rail vehicles.

C. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy (PLA/CCP) 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.

D. United States Employment Plan Program (USEP)

United States Employment Plan Program is applicable on this contract. Staff has been monitoring progress on all USEP commitments, including the contractual commitment in creating employment opportunities in the U.S. The Contractor Kinkisharyo has currently created over 600 new jobs nationwide to support this project, totaling $101,822,155 in new wages and benefits.

To date, Kinkisharyo has exceeded its USEP commitment in new wages and benefits.

USEP Commitment for Base + All Options	**$97,889,293.00**
USEP Actuals to Date	**$101,822,155.49**
Balance of USEP to be Attained	**$0.00**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
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Los Angeles, CA

Metro

Board Report

File #: 2018-0495, **File Type:** Appointment **Agenda Number:** 27.

OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: MEMBERSHIP ON METRO SERVICE COUNCILS

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

APPROVE nominee for membership on Metro's Service Councils (Attachment A).

ISSUE

Each Metro Service Council is comprised of nine Representatives that serve a term of three years; terms are staggered so that the terms of three of each Council's nine members expire annually on June 30. Incumbent Representatives can serve additional terms if re-nominated by the nominating authority and confirmed by the Metro Board.

BACKGROUND

The Metro Service Councils are the first and foremost link for bus riders to interact with the Metro team concerning bus service, system performance, and development of the Measure M bus and rail system. Each Service Council consists of 9 representatives and maintaining a full dais provides the best representation for our customers and residents within each of the 5 designated geographic areas of the County. Depending on the Service Council, representatives are appointed by members of the Board of Supervisors, the Mayor of the City of Los Angeles, Local Councils of Governments, and groupings of cities within the designated geographic areas. All Service Council members nominated for appointment must be confirmed by the Metro Board of Directors.

DISCUSSION

Metro seeks to appoint Service Council members reflective of the demographics of each respective region. The 2010 Census demographics of each of the Service Council regions are as follows:

% Sector Total	Hispanic	White	Asian	Black	Other	Total Pop
San Fernando Valley	41.0%	42.0%	10.7%	3.4%	2.9%	100.0%
South Bay	42.5%	23.8%	12.0%	18.3%	3.4%	100.0%
Westside/Central	43.5%	30.7%	13.0%	10.0%	2.8%	100.0%
Gateway Cities	63.9%	16.7%	8.5%	8.6%	2.3%	100.0%
Service Area Total	48.5%	26.8%	14.0%	8.2%	2.6%	100.0%

The individual listed below has been nominated to serve by the Councils' appointing authorities. If approved by the Board, this appointment will serve a three-year term or the remainder of the seat's three-year term as indicated. A brief listing of qualifications for the new nominee is provided along with the nomination letters from the nominating authorities:

San Fernando Valley

The demographic makeup of the San Fernando Valley Service Council with the appointment of this nominee will consist of five (5) Hispanic members and four (4) White members in terms of racial/ethnic identity. The gender breakdown of the Council will be five (5) men and four (4) women.

A. Jess Talamantes, San Fernando Valley Service Council, New Appointment
Nominated by: Cities of Burbank, Glendale, and San Fernando
Term Ending: June 30, 2021

DETERMINATION OF SAFETY IMPACT

Maintaining the full complement of representatives on each Service Council to represent each service area is important. As each representative is to be a regular user of public transit, and each Council is composed of people from diverse areas and backgrounds, this enables each Council to better understand the needs of transit consumers including the need for safe operation of transit service and safe location of bus stops.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Transform Los Angeles County through Regional collaboration and national leadership. This program will continue to improve safety, service and cleanliness, 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 alternative to approving this appointment would be for this nominee to not be approved for appointment. To do so would result in reduced effectiveness of the Service Councils, as it would increase the difficulty of obtaining the quorum necessary to allow the Service Councils to formulate and submit their recommendations to the Board. It would also result in the Service Councils having less diverse representation of their respective service area.

NEXT STEPS

Staff will continue to monitor the major contributors to the quality of bus service from the customer's perspective, and share that information with the Service Councils for use in their work to plan and to implement and improve bus service in their areas and the customer experience using our bus service.

ATTACHMENTS

Attachment A - New Nominee Listing of Qualifications
Attachment B - Nomination Letters

Prepared by: Conan Cheung, Sr. EO Service Development, Scheduling and Analysis, (213) 418-3034
Gary Spivack, DEO, Regional Service Councils, (213) 418-3234

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

Phillip A. Washington
Chief Executive Officer

ATTACHMENT A

NEW APPOINTEE BIOGRAPHY AND LISTING OF QUALIFICATIONS

Jess Talamantes, Nominee for San Fernando Valley Service Council

Jess Talamantes was first elected to the Burbank City Council in 2009; he has served continuously since then and currently serving his third four year term. During his time on the Council, he has served two one year terms as Mayor and Vice Mayor. Prior to serving as an elected official, Vice Mayor Talamantes had a 32-year career as a Burbank Firefighter working on the frontlines in public safety. Mr. Talamantes has also been involved in a number of boards and commissions, including League of California Cities, San Fernando Valley Council of Governments, Southern California Association of Governments (SCAG), and Burbank City Federal Credit Union. Councilmember Talamantes previously served a term on the San Fernando Valley Service Council from July 2015 through June 2018. A Burbank resident since 1962, Jess is a graduate of John Burroughs High School. He earned his B.S. in Fire Protection Administration and Technology from California State University at Los Angeles.

ATTACHMENT B

APPOINTING AUTHORITY NOMINATION LETTERS

CITY OF BURBANK
OFFICE OF THE CITY MANAGER
(818) 238-5800
FAX (818) 238-5804

August 2, 2018

Mr. Gary Spivack
Deputy Executive Officer
Metro San Fernando Valley Service Council
One Gateway Plaza
Los Angeles, CA 90012-2952

Re: Nomination of Burbank Councilmember Jess Talamantes to the Metro San Fernando Valley Service Council

Dear Mr. Spivack:

As you know, the term of one of the two San Fernando Valley Service Council seats representing the East Cluster cities of Burbank, Glendale, and San Fernando has expired. In order to maintain full representation to this important oversight group, I respectfully request that Burbank Councilmember Jess Talamantes be re-nominated to serve as a member of the Service Council to represent transit riders in the three cities. This nomination has been discussed with officials from the Cities of Glendale and San Fernando, who agree that Councilmember Talamantes is the appropriate person to join San Fernando Councilmember Robert Gonzales in representing the East Cluster cities on the Service Council.

Thank you for considering our request to nominate Jess Talamantes to the San Fernando Valley Service Council. Should you require any further information, please feel free to contact David Kriske in our Community Development Department at 818.238.5269 or via email at dkriske@burbankca.gov.

Sincerely,

Ron Davis
City Manager
City of Burbank

CC: John Takhtalian, Deputy City Manager – City of Glendale
Alexander P. Meyerhoff, City Manager – City of San Fernando

275 E. Olive Avenue • P.O. Box 6459
Burbank, California 91510-6459

CITY OF GLENDALE, CALIFORNIA
Management Services

613 E. Broadway, Suite 200
Glendale, CA 91206-4308
Tel. (818) 548-4844 Fax (818) 547-6740
glendaleca.gov

August 1, 2018

Gary S. Spivack
Deputy Executive Officer, Metro Service Councils
1 Gateway Plaza, MS 99-7-2
Los Angeles, CA 90012

RE: Support for Nomination of Jess Talamantes to Metro San Fernando Valley Service Council

Dear Mr. Spivack:

The City of Glendale is in support of the nomination of Jess Talamantes to serve as one of two appointees for Metro San Fernando Valley Service Council, representing the Eastern Cluster cities of Burbank, Glendale, and San Fernando, for a term running from July 1, 2018 to June 30, 2021.

Council Member Vartan Gharpetian has respectfully withdrawn his nomination to serve on this Service Council, and thanks Mr. Talamantes for his service. We look forward to the great work the Service Council will provide in reviewing the NextGen Bus study, and representing the best interests of the residents of our three cities.

Should you or your staff have any questions, please contact John Takhtalian, Deputy City Manager at (818) 548-4844 or jtakhtalian@glendaleca.gov.

Sincerely,

Yasmin K. Beers
City Manager
City of Glendale

CC: Ron Davis, City Manager, City of Burbank
Justin Hess, Assistant City Manager, City of Burbank
John Takhtalian, Deputy City Manager, City of Glendale

THE CITY OF
SAN FERNANDO

August 28, 2018

Gary S. Spivack, Deputy Executive Officer
Metro Service Councils
1 Gateway Plaza, MS 99-7-2
Los Angeles, CA 90012

SUBJECT: Support for Nomination of Jess Talamantes to Metro San Fernando Valley Service Council

Dear Mr. Spivack:

The City of San Fernando is in support of the nomination of Jess Talamantes to serve as one of two appointees for Metro San Fernando Valley Service Council, representing the Easter Cluster cities of Burbank, Glendale, and Fernando, for a term running from July 1, 2018 to June 30, 2021.

We look forward to the great work the Service Council will provide and in representing the best interests of the residents of our three cities.

Should you have any questions, please feel free to contact City Manager Alexander Meyerhoff at (818) 898-1202 or AMeyerhoff@sfcity.org.

Sincerely,

Sylvia Ballin
Mayor

OFFICE OF THE
CITY COUNCIL

117 MACNEIL STREET
SAN FERNANDO
CALIFORNIA
91340

(818) 898-1201

WWW.SFCITY.ORG

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

File #: 2018-0497, **File Type:** Contract **Agenda Number:** 28.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: RAIL EMERGENCY RESPONSE UNIT CONTRACT

ACTION: CONTRACT AWARD

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a firm fixed price Contract No. OP51822000 with Brandt Group, Road Rail Division, the lowest responsive and responsible bidder, for one (1) Rail Emergency Response Unit in the amount of $1,429,680 inclusive of sales tax, subject to resolution of protest(s), if any.

ISSUE

This procurement is for the replacement of a Metro owned and operated Heavy Duty Rail Recovery Truck (Rail Emergency Response Unit). This equipment is required to support the Rail Fleet Services (RFS) maintenance function of the Light Rail Vehicle (LRV) fleet throughout the Metro system.

BACKGROUND

A rail emergency response unit is used for three main purposes: 1) Pulling stranded LRVs from rail lines due to traction power, overhead catenary system (OCS), or LRV failures, 2) Re-railing LRVs that have derailed on the track, and 3) Commissioning of Mainline and yard to test track and LRVs before start-up of new rail lines or yards.

DISCUSSION

Metro owns and operates three rail emergency response units that are currently deployed at strategic locations supporting service on the Metro Blue, Gold, Green, and Expo, and the rapidly approaching Crenshaw light rail lines. Of these three units, one has been in operation since 1998 and is scheduled for replacement.

The new machine has tandem drive units that provide the ability to negotiate tight curves, specialized couplers to match the LRV’s power supply and braking capabilities, contains on-chassis cabinets for re-railing tools and equipment. In addition, the vehicle will have specialized lighting to augment work at night or any dimly lit conditions such as tunnels.

This purchase of a new rail emergency response unit will provide Metro RFS with the equipment for

the consistent, timely and effective recovery, testing, yard movement and maintenance of the Metro LRV fleet for the next 20 years.

DETERMINATION OF SAFETY IMPACT

The purchase of a new rail emergency response vehicle will provide Metro with an advanced rail recovery vehicle that will ensure that Metro RFS has the equipment needed to quickly and effectively respond to rail system derailments and other emergencies. Response time is a critical factor to ensure the safety of our train operators, patrons, and the general public.

FINANCIAL IMPACT

The recommendation for award is $1,429,680. The funding is included in the LOP of capital project 208601 - Non Rev High Rail Replacement in Cost Center 3790 Maintenance Administration; Account 53106, Acquisition of Service Vehicle. The delivery of the equipment is scheduled up to 12 months after the date of award.

Since this is a multi-year procurement, the cost center manager and project manager will ensure that expenditures are budgeted in future Fiscal Years.

Impact to Budget

The current funding for this acquisition is TDA Article 4. This funding source maximizes allowable fund use given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. This project will improve safety, service, specifically response times during emergencies, 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

Staff considered leasing additional equipment and/or contracting out emergency rail recovery services, but it was found to be cost prohibitive and not recommended. Further, rail recovery is an in-house task currently performed by ATU contract personnel. Contracting out this service would conflict with the Metro/ATU Collective Bargaining Agreement.

The alternative of retaining the existing rail emergency response unit for active continuous service is not recommended. Diminished reliability, high maintenance costs, scarcity of spare parts and frequent repairs over the past several years has rendered the use of the existing unit a poor alternative for continued primary operation, however, the back-up function is a cost effective solution while primary units get needed repairs or maintenance.

Not purchasing the recommended rail emergency response unit will significantly reduce the ability of Metro RFS to effectively respond to Metro light rail emergencies and support LRV commissioning.

Further, the expansion of the Metro rail system requires the purchase of new, reliable and advanced equipment to ensure effective and timely response to LRV emergencies on Metro system for the next 20 years. A do not purchase option is not recommended.

NEXT STEPS

Following the authorization and execution of the contract, the vendor will begin the manufacturing process and provide Metro with a production schedule to identify milestones consistent with the scheduled delivery of the equipment 12 months after the award of the contract.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: Michael Ornelas, Sr. Director Rail Vehicle Maintenance, (213) 922-3223
Daniel Ramirez, Division Maintenance Superintendent, (213) 922-5797

Reviewed by: Debra Avila, Chief, Vendor/Contract Management, (213) 922-6383 James T. Gallagher, Chief Operations Officer, (213) 418-3108

Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

HEAVY DUTY RAIL RECOVERY TRUCK (RAIL EMERGENCY RESPONSE UNIT) OP51822000

1.	**Contract Number**: OP51822000	
2.	**Recommended Vendor**: Brandt Road Rail	
3.	**Type of Procurement (check one):** ☒ **IFB** ☐ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: 03/30/2018	
	B. Advertised/Publicized: 04/02/2018	
	C. Pre-Bid Conference: 04/11/2018	
	D. Bids Due: 05/17/2018	
	E. Pre-Qualification Completed: 07/9/2018	
	F. Conflict of Interest Form Submitted to Ethics: 05/18/2018	
	G. Protest Period End Date: 09/20/2018	
5.	**Solicitations Picked up/Downloaded**: 11	**Bids Received**: 1
6.	**Contract Administrator**: Aryani L. Guzman	**Telephone Number**: 213-922-1387
7.	**Project Manager**: Dan Ramirez	**Telephone Number**: 562-658-0231

A. Procurement Background

This Board Action is to approve Contract No. OP51822000 issued in support of the procurement of a heavy duty rail recovery truck. Board approval of contract award is subject to resolution of any properly submitted protest.

IFB No. OP51822 was issued in accordance with Metro's Acquisition Policy and the contract type is a Firm Fixed Price.

One amendment was issued during the solicitation phase of this IFB:

- Amendment No. 1, issued on April 18, 2018, revised the bid due date.

A total of one bid was received on May 17, 2018.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies with Metro's Acquisition Policy for a single bid from Brandt Road Rail.

Brandt Road Rail was determined to be responsive and responsible to the IFB requirements, and in full compliance with the technical requirements.

Market Survey

Metro staff conducted a market survey to determine the reasons for the lack of formal bid responses to this IFB from other suppliers/distributors.

Ten firms downloaded the solicitation and based on staff's communication with the plan-holders, eight indicated they were unable to meet the technical specifications. The two remaining plan-holders indicated they were unable to submit a competitive price. Staff also determined that there were no restrictive elements in the IFB requirements, and that the solicitation was conducted in a competitive environment.

C. Price Analysis

The recommended bid price from Brandt Road Rail is the result of an open competitive bid process in a competitive environment. The bidder prepared its bid with the expectation of adequate price competition. Both Metro and the supplier anticipated there would be more than one acceptable bid submitted. The formal bid received reflects this anticipated competition. Overall the total bid price has been deemed fair and reasonable.

Bidder Name	Bid Amount	Metro ICE
Brandt Road Rail	$1,429,680	**$1,450,000**

D. Background on Recommended Contractor

The recommended firm, Brandt Road Rail, located in Saskatchewan, Canada, has been in business for 80 years and is a leader in machine manufacturing, engineering, design and development of top heavy duty equipment. Their products are used in 20 countries and on several continents including Australia, North America and Europe. Brandt Road Rail has provided heavy duty rail car mover trucks to Hensel Phelps/Herzog JV (Los Angeles, CA) and Foothill Transit (Azusa, CA).

ATTACHMENT B

DEOD SUMMARY

HEAVY DUTY RAIL RECOVERY TRUCK (RAIL EMERGENCY RESPONSE UNIT) OP51822000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not establish a Small/Disabled Veteran Business Enterprise (SBE/DVBE) goal for this procurement, which involves the purchase of one heavy duty rail recovery truck. DEOD determined that there was a lack of availability of SBE certified firms to purchase the heavy duty rail recovery truck directly from the manufacturer's local dealers.

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.

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

Metro

Board Report

File #: 2018-0504, **File Type:** Contract **Agenda Number:** 29.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMITTEE
SEPTEMBER 20, 2018

SUBJECT: A650 TRACTION GEAR UNIT OVERHAUL (OPTION-BUY FLEET)

ACTION: CONTRACT AWARD

RECOMMENDATION

AWARD a 74-month indefinite delivery/indefinite quantity Contract No. MA47351000 for the overhaul of up to 296 traction gear units for 74 Breda A650 Option Rail Vehicles to ORX, for a not-to-exceed amount of $4,925,746, subject to resolution of protest, if any.

ISSUE

The Original Equipment Manufacturer (OEM) establishes a timeline for vehicle maintenance and major systems overhauls in order to maintain the safety and level of performance of their vehicles.

Implementation of this overhaul program helps ensure the A650 Option-buy fleet remains in a constant State of Good Repair (SGR) by overhauling multiple systems on the vehicles including friction brake, doors, gear units, traction motors, trucks and suspension, auxiliary power and coupler systems. Completing this scheduled overhaul will ensure equipment safety, performance and longevity of the rail cars.

BACKGROUND

The Breda A650 Option-Buy Heavy Rail Vehicle Fleet is in its 21st year of revenue service operations with an average per car mileage of over 1.4 million miles, accumulated fleet mileage of over 98 million miles with consistent performance, and a reliable safety record. The A650 fleet, consisting of 74 rail cars, is due for traction gear unit overhauls per the original equipment manufacturer (OEM) and Metro engineering's recommendations. The traction gear unit overhaul is one of the fourteen vehicle system overhauls.

DISCUSSION

The traction gear unit is a main mechanical component connected to a traction motor that transforms electrical energy to mechanical energy to propel the rail car. Should a traction gear unit fail there is an impact to revenue service with catastrophic results and the vehicle will cease to move. Servicing and inspecting a traction gear unit is performed by in-house maintenance personnel but for a major overhaul, which is beyond the level of in-house maintenance capability, performance by a qualified

vendor is required. The contractor will perform services in accordance with OEM and Metro engineering specifications following production schedule of four traction gear units per month.

The traction gear unit overhaul is one of the fourteen vehicle system overhauls that will require procurement action in the future. The additional systems to be overhauled or modified include car interior renovations, bike area and railing modifications, loop step modification, seat insert replacement, passenger door, friction brake, air compressor, AC evaporator motor upgrade, coupler, semi-permanent drawbar, low voltage power supply, air spring replacement, traction motor, and gear unit overhaul.

DETERMINATION OF SAFETY IMPACT

Passenger and employee safety are of the utmost importance to Metro and, therefore, it is imperative to maintain the A650 option-buy fleet to a constant state of good repair. The traction gear unit overhaul is in support of the complete A650 component overhaul program. This effort will ensure that these vehicles are maintained within OEM recommendations and regulatory standards, according to the defined schedule and technical specification requirements, and within Metro's internal Corporate Safety standards.

FINANCIAL IMPACT

The total contract amount is $4,925,746. Funding of $100,000 for this procurement is included in the FY19 budget in cost center 3942, Rail Fleet Services Maintenance, under project number 206034, line item 50316, Professional & Tech Service.

Since this is a multi-year contract, the cost center manager, project manager and Sr. Executive Officer, Rail Fleet Services will ensure that the balance of funds is budgeted in future fiscal years

Impact to budget

The current source of funding for this acquisition is Proposition A35%. This funding source maximizes allowable allocations given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. 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

Traction gear units are safety critical systems which are required to be overhauled per the OEM and regulatory requirements to avoid catastrophic events resulting from gear and bearing lock with resultant service delays and customer inconvenience. In addition to equipment failure and service delays, deferring the traction gear unit overhaul is not recommended as Metro could also be subject to penalties mandated by the California Public Utilities Commission.

NEXT STEPS

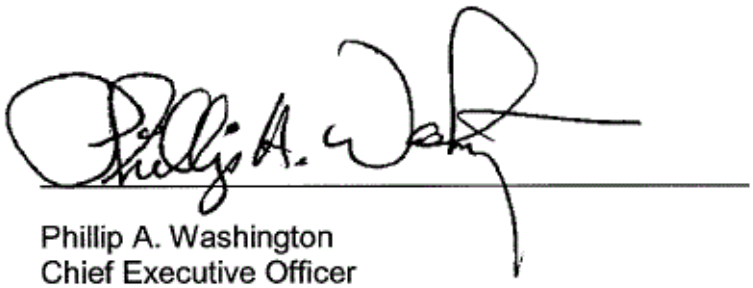
Overhaul of the traction gear unit systems on the A650 heavy rail vehicles will continue in accordance with Rail Fleet Services scheduled requirements. If approved, the project is scheduled to commence in December 2018.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: Fred Kan, Director, Rail Fleet Services, (213) 922-3304
Richard M. Lozano, Sr. Director, Rail Vehicle Maintenance, (310) 816-6694
Robert Spadafora, Sr. Executive Officer, Rail Fleet Services (213) 922-3144

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

PROCUREMENT SUMMARY

A650 (OPTION) TRACTION GEAR UNIT OVERHAUL /MA47351000

1.	**Contract Number**: MA47351000	
2.	**Recommended Vendor**: ORX	
3.	**Type of Procurement (check one):** ☒ **IFB** ☐ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: 11/15/17	
	B. Advertised/Publicized: 11/17/17, 11/18/17	
	C. Pre-Bid Conference: 11/22/17	
	D. Bids Due: 2/16/18	
	E. Pre-Qualification Completed: 5/17/18	
	F. Conflict of Interest Form Submitted to Ethics: 2/21/18	
	G. Protest Period End Date: 09/22/18	
5.	**Solicitations Picked up/Downloaded**: 12	**Proposals Received**: 2
6.	**Contract Administrator**: Lorretta Norris	**Telephone Number**: 213/922-2632
7.	**Project Manager**: Fred Kan	**Telephone Number**: 213/922-3304

A. Procurement Background

This Board Action is to approve Contract No. MA47351000 issued in support of Metro's Red Line A650 Heavy Rail Vehicle (HRV) to procure services required for the complete overhaul of the A650 (Option) traction gear units. A protest was formally lodged by one of the competing bids. That protest and subsequent appeal to the CEO have been reviewed, rejected and fully resolved. Board approval of contract award is subject to resolution of any new properly submitted protest(s), if any.

The Invitation for Bid (IFB) was issued in accordance with Metro's Acquisition Policy and the contract type is an Indefinite Delivery, Indefinite Quantity (IDIQ).

Five amendments were issued during the solicitation phase of this IFB:

- Amendment No. 1, issued on November 20, 2017, established the Pre-Bid Conference date.
- Amendment No. 2, issued on December 12, 2017, revised the bid due date.
- Amendment No. 3, issued on January 10, 2018, replaced the Schedule of Quantities and Prices, extended the comments and questions period, and revised the bid due date.
- Amendment No. 4, issued on January 29, 2018, extended the comments and questions period; and revised the bid due date.
- Amendment No. 5, issued on February 22, 2018, replaced the Schedule of Quantities and Prices.

A Pre-Bid Conference was held November 22, 2017, and it was attended by two participants. A total of two bids were received on February 16, 2018.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies with Metro's Acquisition Policy for a competitive sealed bid. The two bids received are listed below in alphabetical order:

1. Gray Manufacturing Industries (GMI), LLC
2. ORX

The firm recommended for award, ORX, was found to be in full compliance with the bid and technical requirements; and was deemed responsive and responsible. Although GMI's bid price was the lowest, the exceptions contained in its formal bid made their offer non-responsive. GMI's bid was rejected due to cited exceptions to the IFB requirements. GMI protested Metro's bid rejection in March 2018. GMI's protest was rejected by staff and the bid rejection was upheld after appeal to the CEO.

Based on staff's market research, there are only a few technically qualified firms that can perform the A650 gear unit overhauls. Twelve firms downloaded the IFB, two firms submitted formal bids, and one of the formal bids was rejected due to cited exceptions to the IFB requirements.

Staff took a sample of the total number of firms that downloaded the solicitations to determine their reason(s) for not submitting a formal bid. Our findings were either the firms were not in this specialized overhaul business, or they were not technically qualified to complete the work. Staff found that there were no restrictive elements in the IFB requirements and a competitive environment existed at time of bid.

C. Price Analysis

The recommended bid price from ORX has been determined to be fair and reasonable based upon adequate price competition. Although only one bid was responsive and responsible, the recommend bid was offered under a competitive environment.

Proposer Name	Bid Amount	Metro ICE
ORX	$4,925,746	$4,185,000

D. Background on Recommended Contractor

The recommended firm, ORX, located at One Park Avenue, Tipton, PA, has been in business since 1979 and supplies new and remanufactured wheel set assemblies, axles, combo units, traction gear units and trucks to light rail and heavy rail car builders

to transit agencies and private entities throughout the United States and Canada. ORX has done business with New Jersey Transit and JFK AirTran New York City Transit. ORX is currently overhauling Metro's Blue Line wheel set assemblies and have performed satisfactorily.

DEOD SUMMARY

A650 (OPTION) TRACTION GEAR UNIT OVERHAUL /MA47351000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not establish a Small/Disabled Veteran Business Enterprise (SBE/DVBE) goal for this solicitation due to lack of subcontracting opportunities. DEOD explored painting and shipping scopes, however the dollar value slated for these tasks was less than 2% and did not justify a goal.

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.

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

Metro

Board Report

File #: 2018-0506, **File Type:** Oral Report / Presentation **Agenda Number:** 30.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: ORAL REPORT ON CRENSHAW/GREEN LINE OPERATING PLAN

RECOMMENDATION

RECEIVE oral report on Crenshaw/Green Line Operation Plan Motion 40.1 Update.

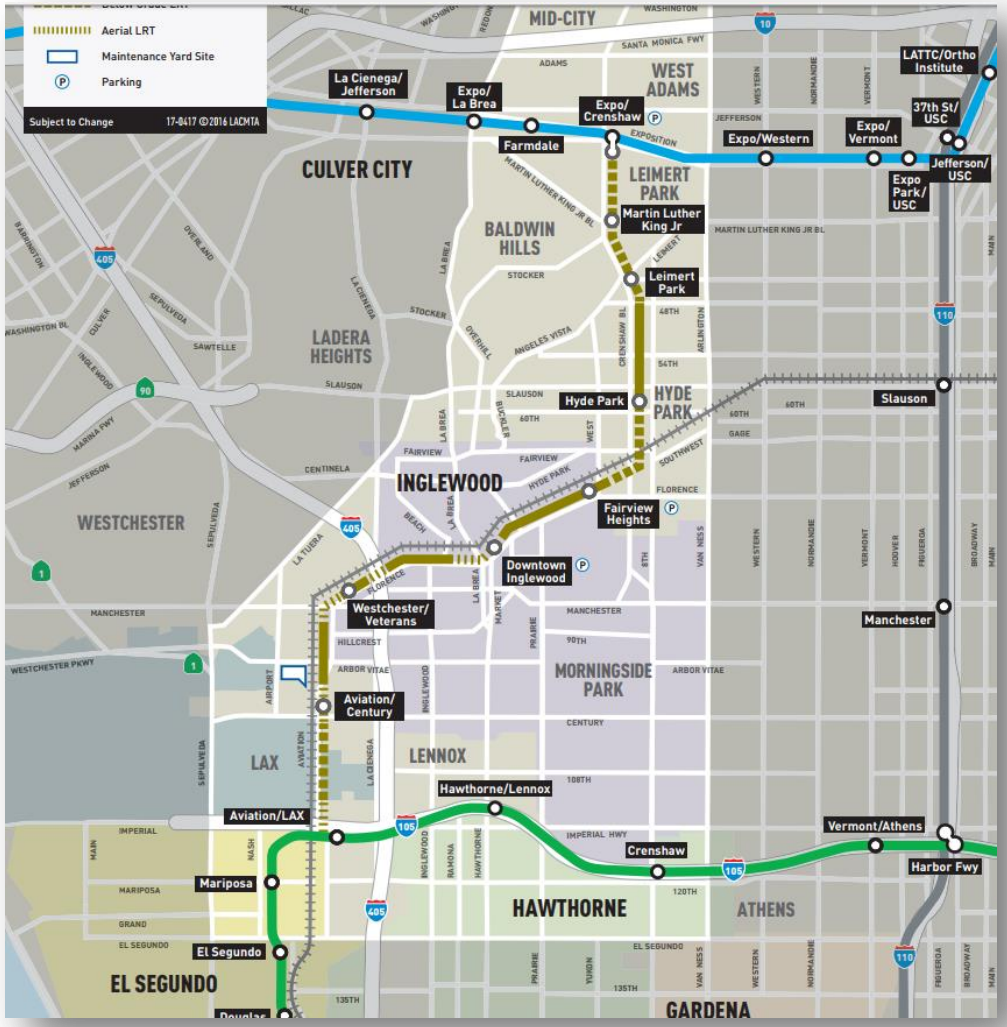
CRENSHAW/GREEN LINE OPERATING PLAN
MOTION 40.1 UPDATE

Expo/Crenshaw Station

SEPTEMBER 20, 2018

MOTION 40.1

- Expand ridership estimates to include projected Green Line extension to Torrance
- Add third scenario that gives both ends of the Green Line a one-seat rider to the Expo Line
- Explain pros/cons of each scenario with robust public engagement with local cities, COGs and the community.



CRENSHAW/GREEN LINE
Average Daily Boardings (Weekdays)

Current Ridership

1) 5,764 Redondo Segment
2) 26,090 Norwalk Segment
3) 16,400 Est. Crenshaw + AMC

Projected Ridership with Torrance Extension

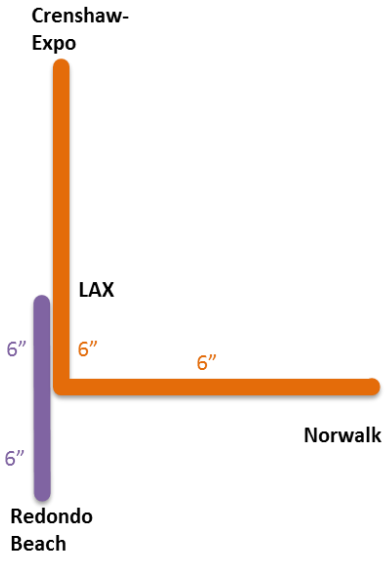
1) 16,264 Redondo/Torrance
2) 26,090 Norwalk Segment
3) 16,400 Est. Crenshaw + AMC

Projected Redondo Beach/Torrance ridership is comparable with Crenshaw ridership. Therefore, the Crenshaw operating plan should be reevaluated at least 1 year prior to Green Line Torrance Extension.

RAIL OPERATIONS SIMULATION

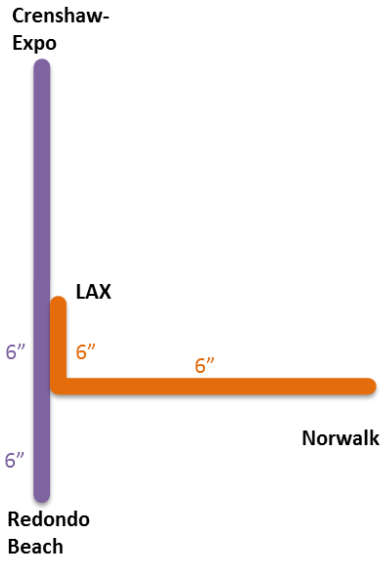
- Task order assigned in early July 2018 to engineering bench contractor to simulate operations of the four alternatives below.
- Simulations completed end of Aug 2018 and shared with stakeholders and communities in September.

Alt C-1: Crenshaw/Norwalk Interline with Redondo Shuttle



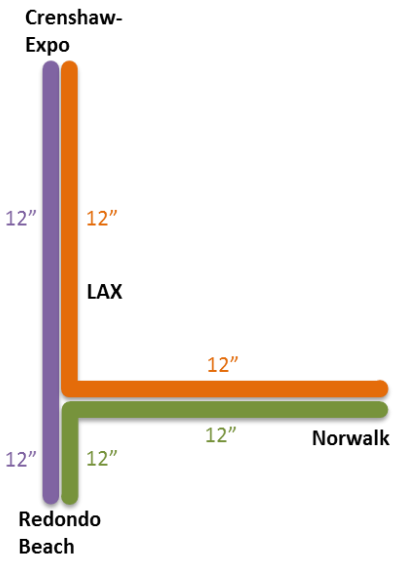
Est. Cars Inc Spares: 54

Alt C-2: Crenshaw/Redondo Interline, Norwalk Shortline



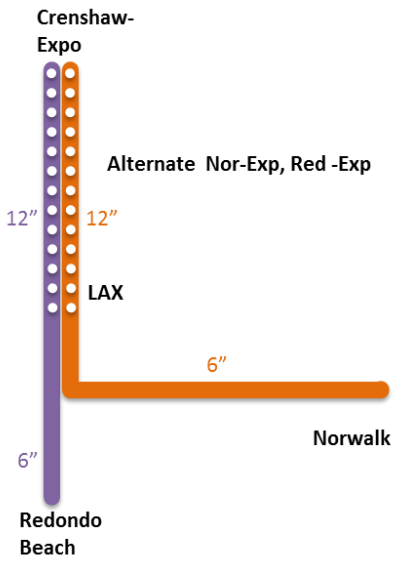
Est. Cars Inc Spares: 52

Alt B-2: Crenshaw/Green Branch



Est. Cars Inc Spares: 48

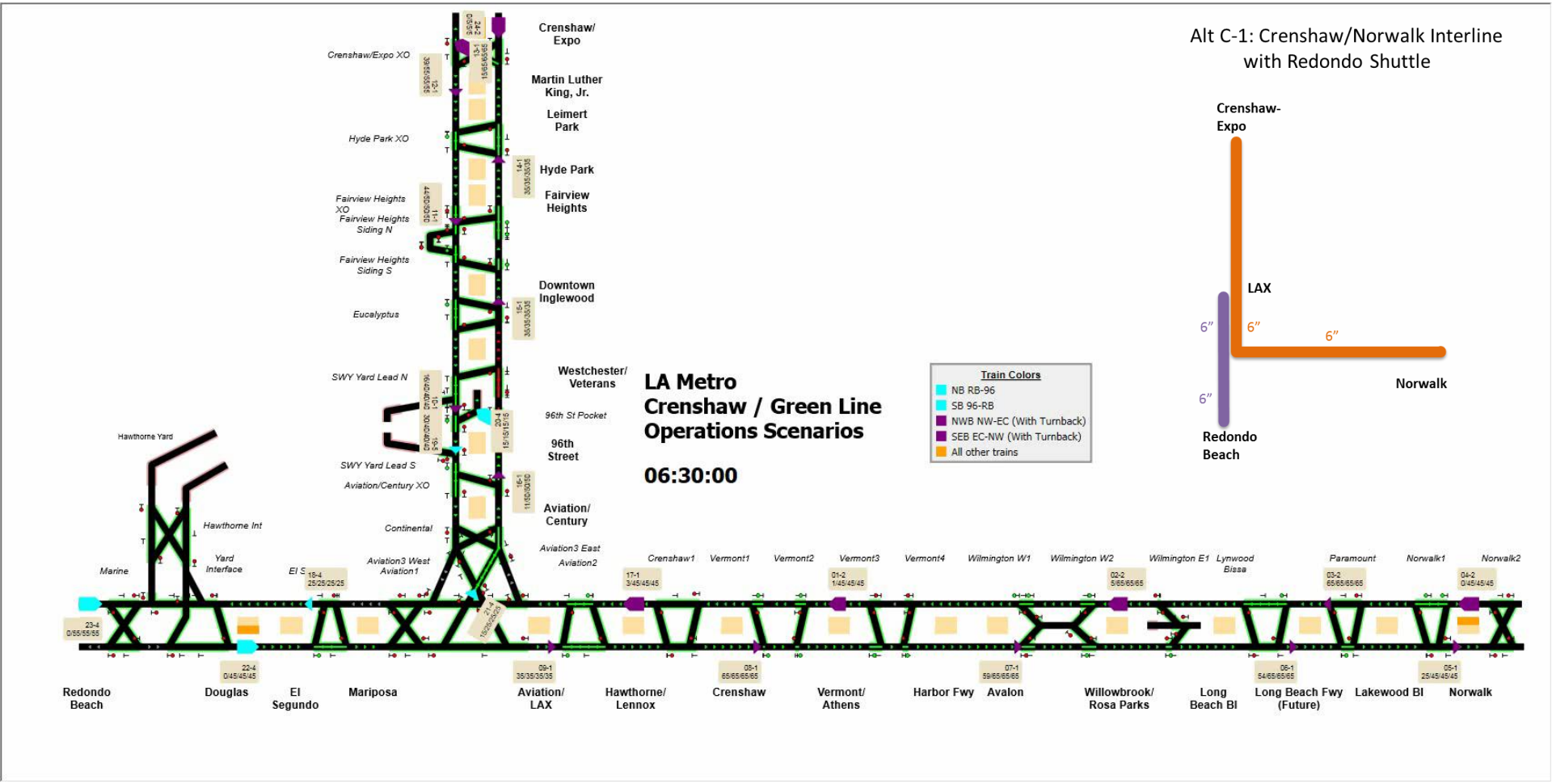
Alt D-1: Alternate Norwalk/ Crenshaw, Redondo/Crenshaw



Est. Cars Inc Spares: 54

ALT C-1 SIMULATION RESULTS

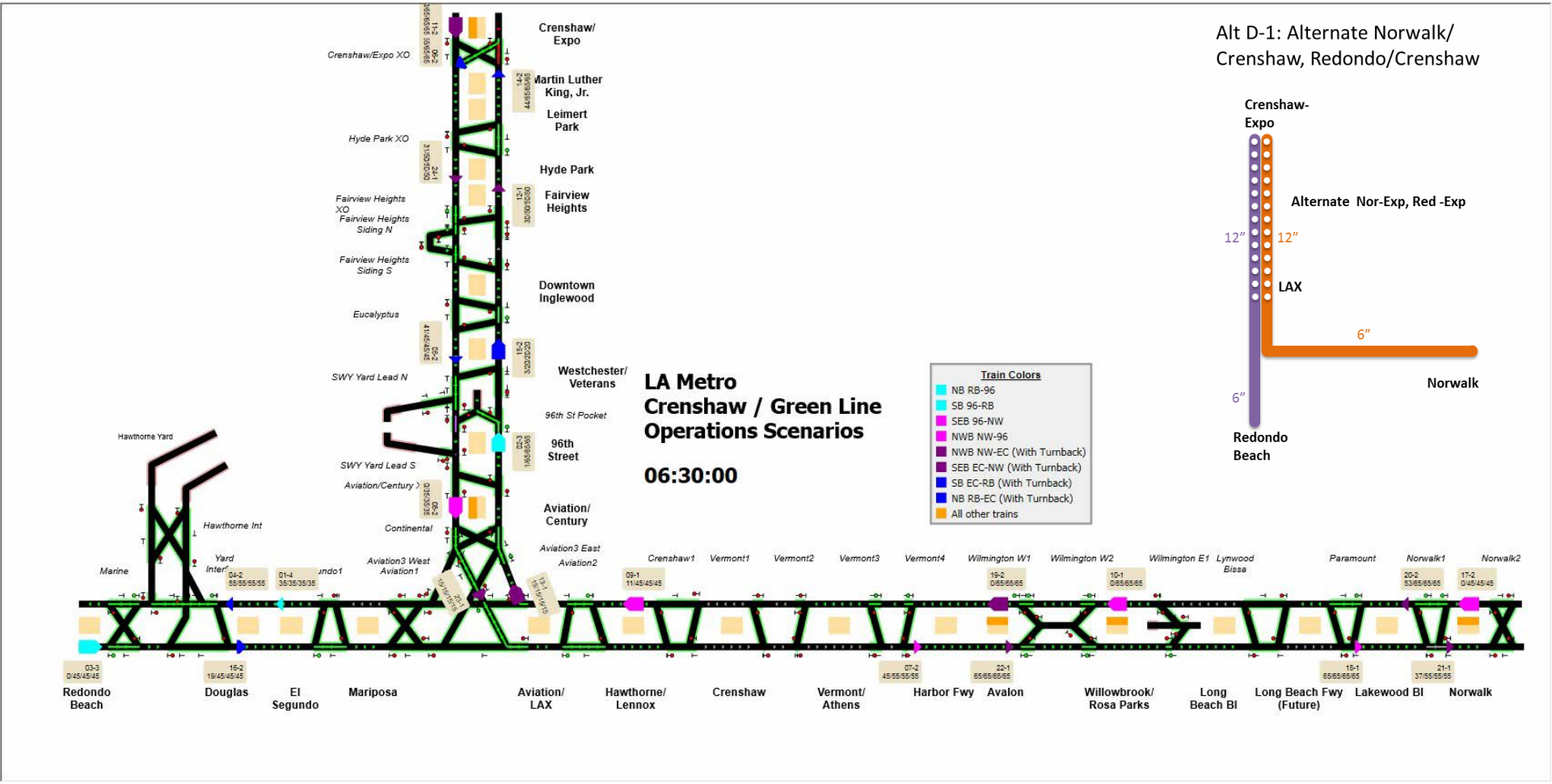
Every 6 min Norwalk-Expo/Crenshaw and Redondo Beach-LAX



ALT D-1 SIMULATION RESULTS

Every 6 min both branches to LAX

Every 12 min each to Expo/Crenshaw



Alt D-1: Alternate Norwalk/ Crenshaw, Redondo/Crenshaw

PUBLIC ENGAGEMENT

Councils of Government

Thursday, July 26 - South Bay COG Transportation Committee
Monday, August 13 - South Bay COG Transportation Committee
Wednesday, September 5 - Gateway Cities COG Transportation Committee
September 27 – South Bay COG Board Meeting

Service Councils

Wednesday, September 12 - Westside Central Service
Thursday September 13 – Gateway Service Council
Friday, September 14 - South Bay Service Council

Community

Tuesday, September 25 - Crenshaw Community Leadership Council (CLC)
Monday, September 17 - Public Meeting (Gateway Council of Governments)
Thursday, September 20 - Public Meeting (The Proud Bird - 11022 Aviation Blvd)
Wednesday, September 26 – Public Meeting (Baldwin Hills Crenshaw Mall)

FEEDBACK TO DATE

- 7 meetings held to date
- Stakeholders understand this is a very complex issue with operating constraints at the junction, and headway and consist (train length) limitations
- All service alternatives include trade-offs between transfers and headways
- The preferred plan should maintain enough capacity to accommodate existing Green Line demand
- The Board should prioritize service based on demand, and as demand changes, the service plan should be revisited
- South Bay Cities COG and Gateway Cities COG have requested operational cost estimates associated with each service alternative

QUESTIONS?

Expo/Crenshaw Station

SEPTEMBER 20, 2018

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

Metro

Board Report

File #: 2018-0523, **File Type:** Contract **Agenda Number:** 31.

OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
SEPTEMBER 20, 2018

SUBJECT: COPY CENTER EQUIPMENT AND SERVICES

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a five-year Contract No. PS110638000 to Canon Solutions America Inc. for Copy Center and Design Studio equipment and services in an amount not-to-exceed $1,590,568, inclusive of sales taxes; subject to the resolution of protest(s), if any.

BACKGROUND

Metro's current contracts for the lease of high-speed copiers, document finishing equipment, maintenance, and other services will expire on December 31, 2018.

DISCUSSION

Metro requires high-speed copy machines, laminating equipment, binding and other finishing equipment to produce a wide range of documents that are required for agency business, including:

- Bus and rail "shake-up" materials
- Board and committee agenda packets
- Budget books
- Bound departmental reports
- Departmental forms
- Large format blueprints and posters
- Procurement IFB and RFP Packages
- Training manuals
- EIR/EIS and other planning documents

Documents are sent to the Copy Center whenever they can be produced more cost effectively and at a higher quality than is possible on convenience copiers. This contract will replace the current contract with Canon.

DETERMINATION OF SAFETY IMPACT

Approval of this Board item will have a neutral impact on safety.

FINANCIAL IMPACT

Funding of $320,000 for this service is included in the FY19 Budget in cost center 6420 Copy Services within project 100001 General Overhead. Since this is a multi-year contract, the cost center manager and Chief Human Capital & Development Officer will be accountable for budgeting the cost in future years.

Impact to Budget

The source of funds for Project 100001 is General Overhead funds, comprised of Federal, state and local funds. These funds are eligible for bus and rail operating costs.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Recommendation supports strategic plan Goal #5 (Provide responsive, accountable, and trustworthy governance). By continuing to be responsive, accountable and trustworthy, Metro will build credibility with decision-makers, customers, and employees and be able to perform more effectively to the changing needs of its business practices.

ALTERNATIVES CONSIDERED

One alternative would be to purchase the existing equipment at the current market value and purchase maintenance services and spare parts required to keep the machines operational. This alternative is not recommended because the current equipment has become less reliable as it has aged. This could delay document production, including documents required for high priority projects.

Another alternative would be to send all high volume jobs to an outside vendor. Sending all photocopying to an outside vendor would extend response time for production of critical documents. This alternative would also require modification of Metro's collective bargaining agreement with TCU that represents Copy Center employees who perform this work.

NEXT STEPS

Upon Board approval, staff will execute Contract No. PS110638000 with Canon for copy center equipment and services.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: Steve Jaffe, DEO General Services
(213) 922-6284

Reviewed by: Joanne Peterson, Chief Human Capital & Development Officer
(213) 418-3088
Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051

Phillip A. Washington
Chief Executive Officer

ATTACHMENT A

PROCUREMENT SUMMARY
COPY CENTER EQUIPMENT AND SERVICES / PS110638000

1.	**Contract Number:** PS110638000	
2.	**Recommended Vendor** : Canon Solutions America, Inc.	
3.	**Type of Procurement (check one):** ☐ **IFB** ☒ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: March 26, 2018	
	B. Advertised/Publicized: March 26, 2018	
	C. Pre-proposal/Pre-Bid Conference: April 3, 2018	
	D. Proposals/Bids Due: May 10,2018	
	E. Pre-Qualification Completed: July 3, 2018	
	F. Conflict of Interest Form Submitted to Ethics: July 10, 2018	
	G. Protest Period End Date: September 24. 2018	
5.	**Solicitations Picked up/Downloaded**: 14	**Bids/Proposals Received**: 3
6.	**Contract Administrator**: Rommel Hilario	**Telephone Number**: (213) 922-4654
7.	**Project Manager**: Raul Gomez	**Telephone Number**: (213) 922-4356

A. Procurement Background

This Board Action is to approve a contract award to lease equipment for the Metro Copy Center. The Contractor will be responsible for furnishing technical support, repair services by factory trained personnel, maintenance, initial and on-going training, applicable software and software licenses, hardware and hardware retrofits, equipment relocation/moving services, and all supplies throughout the term of the Contract. Board approval of contract awards are subject to resolution of any properly submitted protest.

The Diversity and Economic Opportunity Department (DEOD) recommended a 5% Disadvantage Business Enterprise (DBE) goal for this procurement.

In January 2018, Request for Proposal (RFP) No. PS43240, which did not include a small business goal, was scheduled to be presented to the Board for award. However, staff withdrew the item from the Board agenda to allow small business participation in a reprocurement. On January 30, 2018, the solicitation was cancelled.

On March 26, 2018, RFP No. PS43240-2 was issued as a competitively negotiated procurement in accordance with Metro's Acquisition Policy.

Three amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on April 2, 2018, added equipment minimum requirements.

- Amendment No. 2, issued on April 4, 2018, included pre-proposal documents including the agenda, sign-in sheets, and planholder's list.

- Amendment No. 3 , issued on April 11, 2018, included revised language for references, provided Metro Copy Center drawings, and extended the proposal due date.

A pre-proposal conference was held on April 3, 2018. A total of nine participants representing five firms were in attendance.

On May 10, 2018, Metro received three proposals from three firms as listed below, in alphabetical order:

1. American Business Machines
2. Canon Business Solutions, Inc.
3. Xerox Corporation

B. Evaluation of Proposals

The Proposal Evaluation Team (PET), consisting of staff from the Communications and General Services departments was convened and conducted a comprehensive technical evaluation of the proposal received.

Proposals were evaluated based on the following criteria and weights:

• Degree of the Contractor's (Firm and Staff) Skills and Experience	30%
• Understanding of the Work and Effectiveness of Management Plan	30%
• Cost Proposal	25%
• Site Visit	15%

Site visits were conducted by the PET at proposing firms' local customers in order to observe and interview staff about the equipment proposed by the firms. Site visits were conducted between May 31, 2018 and June 15, 2018.

Following is a summary of the PET scores:

1	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
2	**Canon Solutions America, Inc.**				
3	Degree of the Contractor's (Firm and Staff) Skills & Experience	91.0	30%	27.30	
4	Understanding of the Work and Effectiveness of Management Plan	92.0	30%	27.60	
5	Cost Proposal	100.0	25%	25.00	
6	Site Visit	91.0	15%	13.65	
7	**Total**		**100.00%**	**93.55**	**1**
8	**Xerox Corporation**				
9	Degree of the Contractor's (Firm and Staff) Skills & Experience	89.3	30%	26.79	
10	Understanding of the Work and Effectiveness of Management Plan	85.0	30%	25.50	
11	Cost Proposal	88.0	25%	22.00	
12	Site Visit	86.0	15%	12.90	
13	**Total**		**100.00%**	**87.19**	**2**
14	**American Business Machines**				
15	Degree of the Contractor's (Firm and Staff) Skills & Experience	79.3	30%	23.79	
16	Understanding of the Work and Effectiveness of Management Plan	64	30%	19.20	
17	Cost Proposal	76	25%	19.00	
18	Site Visit	89.3	15%	13.40	
19	**Total**		**100.00%**	**75.39**	**3**

C. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon adequate competition, price analysis, fact finding, and technical evaluation which included a review of equipment specifications as stated in the Statement of Work.

PROPOSER	PROPOSED AMOUNT	METRO ICE	AWARD AMOUNT
Canon Solutions America, Inc.	$1,590,568	$1,936,500	$1,590,568
Xerox Corporation	$1,783,065		
American Business Machines	$2,123,629		

D. Background on Recommended Contractor

Since 1971, Canon Solutions America, Inc. (Canon) has been providing integrated systems technology that comprises one of the strongest solutions portfolios in the industry. Canon is a wholly-owned sales subsidiary of Canon U.S.A. Inc. operating within the United States and part of the region called Canon Americas. Canon has been the equipment vendor for the Metro Copy Center for the past five years. Over that period of time, they have been working closely with staff in support of Metro Copy Center and Canon has performed satisfactorily.

ATTACHMENT B

DEOD SUMMARY

COPY CENTER EQUIPMENT AND SERVICES / PS110638000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 5% Disadvantaged Business Enterprise (DBE) goal for this procurement. Canon Solutions America, Inc. exceeded the goal by making a 5.50% DBE commitment.

Small Business Goal	5.00% DBE	Small Business Commitment	5.50% DBE

	DBE Subcontractors	Ethnicity	% Committed
1.	Say Cargo Express, Inc.	Hispanic American Female	1.16%
2.	Universal Reprographics, Inc.	Caucasian Female	4.34%
	Total		**5.50%**

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) 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.