



**Metro**

Metropolitan Transportation Authority

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**OPERATIONS COMMITTEE  
FEBRUARY 19, 2009**

**SUBJECT: BLUE LINE EQUIPMENT REPLACEMENT**

**ACTION: EXECUTE A LETTER OF AGREEMENT WITH THE EXPOSITION  
CONSTRUCTION AUTHORITY**

**RECOMMENDATION**

Authorize the Chief Executive Officer to execute a Letter- of -Agreement with the Exposition Construction Authority for purchase of Train -to -Wayside Communications equipment in an amount not to exceed \$1.53 million.

**ISSUE**

The Exposition Line and the Metro Blue Line will share both alignment and light rail vehicles. In recognition of this, the Board has already authorized Capital project #211003 for the replacement of the existing obsolete Train to Wayside Communications (TWC) equipment on the Metro Blue Line for a system compatible with that being deployed on the Exposition Line.

It is essential that the carborne and wayside TWC equipment installed on the Blue Line track and vehicles is fully compatible with that deployed on the Expo line to ensure seamless revenue operation between the lines. To ensure compatibility, the Exposition Construction Authority has offered to procure TWC equipment on Metro's behalf through its existing Train Control equipment contractor. Expo's Train Control Contractor, B&C Transit, has recently selected its TWC vendor; Hanning & Kahl. This is also the vendor of TWC equipment to Metro for the existing Pasadena Gold Line and the Eastside line. Hanning & Kahl have already inspected and reviewed existing Blue Line vehicles and wayside installations and have provided Metro with a detailed design and break-down of equipment needed to complete installation.

Time is of the essence in this procurement. The Exposition line is due to commence integrated testing in late 2009/early 2010 and enter pre-revenue service in mid 2010. It is essential that Metro make significant progress in change-over of wayside and carborne TWC equipment by early 2010. Expo's offer to procure equipment on our behalf will both ensure compatibility of equipment and streamline purchase of equipment to enable expeditious progress into installation by Metro Wayside and Rail Fleet personnel.

Execution of a Letter of Agreement with the Exposition Construction Authority will enable the Construction Authority to negotiate a change-order with its existing Train Control equipment supplier and to draw from Metro's existing Capital Program to procure TWC equipment on Metro's behalf.

## **DISCUSSION**

The Metro Board authorized expenditure of \$1.75m in Rail Rehabilitation funds for Capital Project #211003 for the replacement of the existing Metro Blue Line Train-to-Wayside (TWC) equipment. This equipment is obsolete and no longer supported by the original vendor (GRS/Alstom). The TWC equipment is provided to enable train operators to request routes, or to request grade crossing activation, from within the cab. This system essentially parallels some of the capabilities of Rail Operations Control.

The Exposition Line was planned and developed on the premise that a new TWC system would be deployed, similar to that in use on the Metro Gold Line. In recognition of the fact that the Blue and Expo lines will share track and vehicles, Metro staff recognized that the new system would not be compatible with the existing TWC equipment and that replacement of the TWC system was necessary.

Since inception of this project in FY09, Metro Wayside, Operations & Rail Fleet engineering and maintenance staff have cooperated to determine the requirements, scope, methods and phasing of TWC replacement on the Blue Line. In particular, Metro staff has planned how gradual cut-over of wayside and carborne equipment will be coordinated to minimize disruption to on-going Blue Line operations.

Review of the scope and method of equipment replacement and installation recently culminated in a report by Expo's TWC Vendor (Hanning & Kahl), outlining the equipment, materials and configuration needed to replace existing carborne and wayside TWC equipment.

## **FINANCIAL IMPACT**

The funding of \$273,000 is included in the FY09 budget in cost center #3960 and project # CP211003 (MBL TWC Rehabilitation). This is a multi-year project, with an LOP budget of \$1.75 million. The source of funds is Prop A 35%. This action will transfer \$1.53 million of the \$1.75million LOP budget to Expo.

## **ALTERNATIVES CONSIDERED**

The Metro Board could choose to not procure equipment through the Exposition Construction Authority and instead issue a Request for Bids for Blue Line TWC equipment. This action is not recommended as Metro staff would have to develop a detailed and prescriptive specification to ensure compatibility with the Expo Line and then proceed through a full competitive bidding cycle. This would delay delivery of equipment by 6 to 9 months and jeopardize our ability to commence revenue operations in a seamless manner. 7

## NEXT STEPS

If the Metro Board authorizes the CEO to execute a LOA with the Exposition Construction Authority, Metro staff will work with Expo staff to negotiate and execute a Change-Order with Expo's existing Train Control equipment supplier for the supply of carborne and wayside TWC equipment.

## ATTACHMENTS

- A. Capital Project Funding and Expenditure Plan

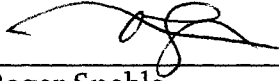
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Roger Snoble  
Chief Executive Officer

**Attachment A**

**MBL TWC REHABILITATION – CP 211003**

**CAPITAL PROJECT FUNDING & EXPENDITURE PLAN**

	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>TOTAL</b>
<b>Uses of Funds:</b>					
Equipment	\$ -	\$ 1,530,000	\$ -	\$ -	\$ 1,530,000
Labor (incl. installation)	\$ 70,042	\$ 149,958	\$ -	\$ -	\$ 220,000
<b>Total Project Cost</b>	<b>\$ 70,042</b>	<b>\$ 1,679,958</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,750,000</b>
<b>Sources of Funds:</b>					
Prop A 35% Rail Rehab	\$ 70,042	\$ 1,679,958	\$ -	\$ -	\$ 1,750,000
					\$ -
<b>Total Project Funding</b>	<b>\$ 70,042</b>	<b>\$ 1,679,958</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,750,000</b>

