


**CITY AND COUNTY OF SAN FRANCISCO**  
**BOARD OF SUPERVISORS**  
**BUDGET AND LEGISLATIVE ANALYST**

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September 26, 2014

**TO:** Budget and Finance Committee  
**FROM:** Budget and Legislative Analyst   
**SUBJECT:** October 1, 2014 Budget and Finance Committee Meeting

**TABLE OF CONTENTS**

<b>Item</b>	<b>File</b>	<b>Page</b>
1	14-0928 Contract Amendment – AnsaldoBreda, Inc. Light Rail Vehicle Reconditioning and Systems Rehabilitation – Not to Exceed \$104,263,354.....	1

<p><b>Item 1</b> <b>File 14-0928</b></p>	<p><b>Department:</b> Municipal Transportation Agency (MTA)</p>
<p><b>EXECUTIVE SUMMARY</b></p>	
<p style="text-align: center;"><b>Legislative Objectives</b></p> <p>The proposed resolution would approve the second amendment to the existing contract between the Municipal Transportation Agency (MTA) and AnsaldoBreda, Inc. (Breda). The second amendment would: (1) eliminate rehabilitation of the doors and steps system and the air supply system from the scope of work of the existing contract because this work could be completed in-house by the MTA; (2) add rehabilitation of the trucks of an additional 41 light rail vehicles; and (3) authorize the Director of Transportation, at his sole discretion, to exercise three future contract options for Breda to rehabilitate a total of 71 additional light rail vehicles.</p> <p>The proposed resolution would increase the not-to-exceed amount of the contract between MTA and Breda by \$35,513,933 from \$68,749,421 to \$104,263,354, and extend the term of the contract by three years from October 2015 through October 2018.</p> <p style="text-align: center;"><b>Key Points</b></p> <ul style="list-style-type: none"> <li>• MTA entered into the original contract with Breda in October 2009 for a five-year term from November 2009 through October 2014 and for an amount not to exceed \$56,752,554 to rehabilitate key components of the MTA light rail vehicle fleet. MTA amended the contract in June 2010 to (1) expand the scope of work to provide for scheduled rehabilitation of the trucks of 34 light rail vehicles, (2) extend the term by one year from October 29, 2014 through October 29, 2015, and (3) increase the contract not-to-exceed amount by \$11,996,867 from an amount not to exceed \$56,752,554 to an amount not to exceed \$68,749,421.</li> <li>• Under the second amendment, door, step system, and air supply system services currently performed by Breda will be eliminated from the contract and performed by MTA staff instead.</li> </ul> <p style="text-align: center;"><b>Fiscal Impact</b></p> <ul style="list-style-type: none"> <li>• The proposed second amendment to the existing contract between Breda and the MTA would increase the total contract not-to-exceed amount by \$35,513,933 from an amount not to exceed \$68,749,421 to an amount not to exceed \$104,263,354, which includes three future options to rehabilitate an additional 71 light rail vehicles. The Budget and Legislative Analyst recommends amending the proposed resolution to require Board of Supervisors approval of the three future options in order for MTA to report on their evaluation of Breda’s performance prior to exercising the options.</li> </ul> <p style="text-align: center;"><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>• Amend the proposed resolution to (1) reduce the contract not-to-exceed amount by \$29,613,740 from the requested not-to-exceed contract amount of \$104,263,354 to a not-to-exceed contract amount of \$74,649,614 and (2) state that the three future contract options would require Board of Supervisors approval prior to the Director of Transportation exercising the option.</li> <li>• Approve the proposed resolution as amended.</li> </ul>	

**MANDATE STATEMENT / BACKGROUND****Mandate Statement**

City Charter Section 9.118(b) states that a contract entered into by a department, board or commission that (1) has a term of more than ten years, (2) requires expenditures of \$10 million or more, or (3) requires a modification of \$500,000 or more is subject to Board of Supervisors approval.

**Background**

The San Francisco Municipal Transportation Agency (MTA) currently operates 151<sup>1</sup> light-rail vehicles to provide mass transportation over 71.5 miles of track throughout the City. The current fleet of light-rail vehicles started operating in 1996 with an estimated 25-year operating life through 2021. AnsaldoBreda, Inc. (Breda), a private for-profit company, built and assembled the current fleet of MTA light-rail vehicles.

According to the MTA, the Breda light rail vehicles are failing regularly. On average, only 114, or approximately 75 percent, of the current fleet of 151 light rail vehicles operates on a daily basis with the remaining 37 vehicles needing maintenance and repair.

Table 1 below shows the MTA actual costs of labor and parts expended to maintain and repair the current fleet from January 2014 through June 2014 and includes the annual estimated costs.

**Table 1: Light Rail Vehicle Maintenance and Repair Costs**

	<b>Actual Labor Costs Jan – June 2014</b>	<b>Actual Materials Costs Jan - June 2014</b>	<b>Total Costs Six Months</b>	<b>Annual Estimated Costs</b>
Propulsion System	\$862,861	\$3,889,220	\$4,752,081	\$9,504,162
Advanced Train Control System	1,922,752	2,598,293	4,521,045	9,042,090
Door and Steps	1,145,094	871,816	2,016,910	4,033,820
Lighting	289,974	772,952	1,062,926	2,125,852
Trucks	531,986	526,312	1,058,298	2,116,596
Power Supply	557,521	394,154	951,675	1,903,350
Heating, Ventilation, and Air Conditioning	589,593	220,241	809,834	1,619,668
Brakes	339,842	371,653	711,495	1,422,990
Coupler and Draft Gear	312,506	300,073	612,579	1,225,158
Communications	133,295	296,935	430,230	860,460
<b>Total</b>	<b>\$6,685,424</b>	<b>\$10,241,649</b>	<b>\$16,927,073</b>	<b>\$33,854,146</b>

Source: San Francisco Municipal Transportation Agency, Budget and Legislative Analyst's Office

<sup>1</sup> According to the MTA Transit Fleet Management Plan (March 2014), two light-rail vehicles are damaged beyond repair and cannot return to service. There are four additional vehicles that are scheduled to return to service some time in calendar year 2015.

### **Contract for Rehabilitation**

In May 2009, the MTA issued a competitive Request-for-Proposals (RFP) for a new contract to rehabilitate key components of the MTA light rail vehicle fleet including: (a) reconditioning the doors and steps systems, (b) rehabilitating the couplers systems, the air supply units, and a portion of the cable system, (c) upgrading the articulation wire harness, (d) replacing the resilient pins in the articulation section, and (e) replacing the bearings in the traction motor. Breda submitted the lone proposal and was awarded the contract in September 2009.

In October 2009, the Board of Supervisors approved a resolution (File 09-1109) to approve the contract between the City and Breda for a five-year term from November 2009 through October 2014 and for an amount not to exceed \$56,752,554.

In June 2010, the Board of Supervisors approved a resolution (File 10-0030) to amend the original contract (first amendment) to (1) expand the scope of work to provide for scheduled rehabilitation of the trucks of 34 light rail vehicles, (2) extend the term by one year from October 29, 2014 through October 29, 2015, and (3) increase the contract not-to-exceed amount by \$11,996,867 from an amount not to exceed \$56,752,554 to an amount not to exceed \$68,749,421. The increased contract amount for the first amendment was funded by federal American Reinvestment and Recovery Act (ARRA) grant funds awarded to the MTA.

According to the Budget and Legislative Analyst's report to the May 19, 2010 Budget and Finance Subcommittee, MTA considered issuing a new RFP to rehabilitate the trucks of 34 light rail vehicles rather than amending the existing contract between MTA and Breda, but determined that because Breda was the only proposer for the existing contract, Breda would also likely be the sole proposer if a new RFP were issued. According to MTA, federal law allowed for the award of the proposed first amendment, funded by federal ARRA grant funds, as a sole source contract if undergoing a competitive process would likely result in (a) only one bid, (b) substantial increased cost, or (c) unacceptable delay in the project.

### **DETAILS OF PROPOSED LEGISLATION**

The proposed resolution would approve the second amendment to the existing contract between the City and Breda. The proposed second amendment would:

- (1) Eliminate rehabilitation of the doors and steps system and the air supply system from the scope of work of the existing contract because this work could be completed in-house by the MTA;
- (2) Add rehabilitation of the trucks of an additional 41 light rail vehicles; and
- (3) Authorize the Director of Transportation, at his sole discretion, to exercise three future contract options for Breda to rehabilitate the trucks of additional light rail vehicles: trucks of 24 light rail vehicles under the first option, trucks of 24 of the light rail vehicles under the second option, and trucks of 23 light rail vehicles under the third option, or a total of 71 additional light rail vehicles.

The proposed resolution would increase the not-to-exceed amount of the contract between the City and Breda by \$35,513,933 from an amount not to exceed \$68,749,421 to an amount not to

exceed \$104,263,354, and extend the term of the contract by three years from October 2015 through October 2018.

According to Mr. Elson Hao, MTA Principal Engineer, MTA decided to negotiate the second amendment with Breda, rather than undergoing a competitive RFP process because the MTA has been satisfied with Breda service on the all the light rail vehicle systems under the existing contract, other than the rehabilitation of the doors and steps system and the air supply system which are being removed from the scope of work.

### **Removal of the Doors and Steps System, and the Air Supply System from the Scope of Work**

According to Mr. Hao, the Breda process for replacing the doors and steps systems requires the MTA to dedicate eight vehicles at a time for rehabilitation, takes over 30 days because Breda removes the doors and transports them to the initial manufacturer for rehabilitation, and has not significantly improved the rate of failure for these systems. According to Mr. Hao, the Breda services to the air supply system have also not produced significant improvements in the failure rate. According to Mr. Hao, the MTA can provide a higher level of service by using its own mechanics in-house, which will reduce the number of vehicles dedicated to rehabilitation and increase the number available for service within a faster time frame than Breda.

According to Mr. Hao, the MTA will be able to realign its existing group of mechanics to absorb the door and steps system and air supply system work without requiring additional mechanics or related costs.

### **Rehabilitation of 41 Light Rail Vehicles**

According to Mr. Hao, rehabilitation of the trucks of 41 light rail vehicles is necessary because these vehicles have travelled between 200,000 and 400,000 miles since entering revenue service and have exceeded their mid-life of 12.5 years. MTA needs to perform rehabilitation of the various systems of these 41 light rail vehicles in order to keep the vehicles in a good state of repair. According to Mr. Hao, MTA's maintenance data shows that the rehabilitation of light rail vehicles by Breda under the existing contract has significantly improved the reliability of these vehicles.

## **FISCAL IMPACT**

The second amendment to the existing contract between Breda and the MTA would increase the total contract not-to-exceed amount by \$35,513,933 from an amount not to exceed \$68,749,421 to an amount not to exceed \$104,263,354 for (1) rehabilitating the trucks of 41 light rail vehicles, and (2) three future options to potentially rehabilitate the trucks of 71 additional light rail vehicles at the discretion of the Director of Transportation.

The MTA will re-allocate \$3,405,759 in unspent funds from the existing contract, and \$2,494,434 in Transportation and Street Infrastructure Program (TSIP) funds, previously appropriated by the Board of Supervisors, to pay for rehabilitation of the trucks of 41 light rail vehicles and other work under the second amendment of the contract, totaling \$5,900,193. The

MTA will use future TSIP, federal, regional and other local funds when they become available, totaling \$29,613,740, to fund the three proposed contract options.

Table 2 below details the source and uses of the requested not-to-exceed contract increase of \$35,513,933.

**Table 2: Sources and Uses of Funds**

<b>Sources</b>	
Reallocation of existing contract funds	\$3,405,759
Transportation and Street Infrastructure Program funds (TSIP, City General Fund)	2,494,434
Subtotal, TSIP	5,900,193
Future TSIP, federal, regional and local funds	29,613,740
<b>Total Sources</b>	<b>\$35,513,933</b>
<b>Uses</b>	
Rehabilitating the trucks of 41 light rail vehicles	\$14,999,768
Savings from removal of rehabilitation of doors, steps system, and air supply units from contract scope	(13,650,748)
Subtotal	1,349,020
Spare parts already purchased by vendor	2,151,042
Spare parts for project work	1,868,164
Taxes	281,967
Project contingency	250,000
Subtotal, Rehabilitation 41 Light Rail Vehicles and Related Work	\$5,900,193
<b>Options</b>	
Option 1 – trucks of 24 light rail vehicles (Before June 2015)	\$9,663,696
Option 2 – trucks of 24 light rail vehicles (Before December 2015)	9,846,528
Option 3 – trucks of 23 light rail vehicles (Before June 2016)	9,615,035
Option Taxes	488,481
Subtotal, Options	\$29,613,740
<b>Total Uses</b>	<b>\$35,513,933</b>

Schedule C of the second amendment contains the price schedule for the work to be performed by Breda. According to Mr. Hao, the unit cost and total price for each component of work to be performed by Breda under the second amendment are based on the original proposal by Breda from September 2009. According to Mr. Hao, the unit costs and total prices listed in Schedule C are comparable to the MTA engineer's estimate at the time of the original proposal in September 2009.

Under the existing contract, if MTA eliminates a portion of the work, then MTA must compensate Breda and its suppliers for parts that have already been purchased and cannot be sold or used on other projects. As noted above, the second amendment eliminates the rehabilitation of the doors and steps system and the air supply system from the contract's scope of work. MTA will pay Breda \$1,957,831 for door and stair system parts and \$193,211 for air supply system parts for a total of \$2,151,042. According to Mr. Hao, the MTA will retain

these parts and use them to rehabilitate light rail vehicles through the MTA's in-house repair process.

### **Contract Options**

The second amendment to the existing contract contains three separate future options at the sole discretion of the Director of Transportation to (1) rehabilitate the trucks of 71 additional light rail vehicles, (2) extend the term of the contract through October 31, 2018, and (3) increase the contract expenditures by \$29,613,740.

As shown in Table 2 above, the three future options may be executed before June 2015, before December 2015, and before June 2016 respectively and will be funded, according to Mr. Hao, in future budgets through a combination of funds including future Transportation Street and Infrastructure Program allocations that are included in the MTA's Capital Plan.

The MTA should evaluate Breda's performance under the proposed second amendment and report to the Board of Supervisors before exercising the three contract options to rehabilitate the trucks of an additional 71 light rail vehicles. Therefore, the Budget and Legislative Analyst's Office recommends amending the proposed resolution to (1) reduce the contract not-to-exceed amount \$29,613,740 to rehabilitate the trucks of 71 additional light rail vehicles from the requested not-to-exceed contract amount of \$104,263,354 to an amended not-to-exceed contract amount of \$74,649,614 and (2) state that any of the three contract options to rehabilitate the trucks of 71 additional light rail vehicles would require Board of Supervisors approval prior to the Director of Transportation exercising the option.

### **RECOMMENDATIONS**

1. Amend the proposed resolution to (1) reduce the contract not-to-exceed amount by \$29,613,740 from the requested not-to-exceed contract amount of \$104,263,354 to a not-to-exceed contract amount of \$74,649,614 and (2) state that the three future contract options would require Board of Supervisors approval prior to the Director of Transportation exercising the option.
2. Approve the proposed resolution as amended.