



OPERATIONS COMMITTEE  
JANUARY 16, 2003

**SUBJECT: UNIVERSAL FARE SYSTEM (UFS)**

Metropolitan  
Transportation  
Authority

**ACTION: AUTHORIZE AN INCREASE TO THE CUBIC  
TRANSPORTATION SYSTEMS, INC. (CTS) CONTRACT TO  
PURCHASE EQUIPMENT FOR THE SAN FERNANDO  
VALLEY BUS RAPID TRANSIT (SFVBRT) PROJECT**

One Gateway Plaza  
Los Angeles, CA  
90012-2952

**RECOMMENDATION**

Authorize the Chief Executive Officer to execute an amendment to contract No. OP-02-4610-10 with Cubic Transportation Systems, Inc. (CTS) to provide Universal Fare System (UFS) equipment in the amount not-to-exceed \$7,454,844, increasing the total contract value from \$89,003,444 to \$96,458,288.

**RATIONALE**

In accordance with the current implementation of the Universal Fare System (UFS), any bus fleet expansion or new rail projects will utilize UFS fare collection equipment to enable the region's customers to travel seamlessly and ensure compatibility with other transit systems within Los Angeles County.

The UFS contract with Cubic Transportation Systems, Inc. (CTS) will replace MTA's obsolete bus and rail fare collection equipment with new, electronic Ticket Vending Machines (TVM), Stand Alone Validators (SAV), Validating Fareboxes and other ancillary equipment to automate fare collection on all MTA bus and rail service. Staff recommends the purchase of SFVBRT rail ticket vending machines and smart card validators now, in consideration of approximately \$2 million savings to be derived as an amendment to the current UFS contract prior to the expiration of base contract pricing.

The SFV BRT is scheduled for revenue operation by April 2005 as the UFS Project competes final systems acceptance. During Phase I, SFVBRT will operate like a light rail system on the dedicated right of way; therefore, the current amendment is limited to ticket vending machines and stand alone validators. Bus fare boxes may be procured at a later date and these BRT vehicles include provisions for their future installation. This will allow for maximum flexibility for future expansion phases of the BRT system.

**REVISED FINANCIAL IMPACT TO  
SEPARATE MAINTENANCE COST  
FROM CAPITAL EQUIPMENT**

The Contract was awarded to CTS on March 7, 2002 in the amount of \$89,003,444 with the ability to purchase additional equipment quantities at the base bid unit prices for six months after issuance of the Notice to Proceed (March 12, 2002), or September 2002. CTS has subsequently extended the original six months time frame for MTA to purchase additional equipment until January 31, 2003. After January 31, 2003 additional equipment and materials are priced on a quantity- based price schedule that is less economical than the base bid prices. The savings of approximately \$2 million dollars estimated for this amendment is based on purchasing the equipment now as part of the base-manufacturing run. Given the UFS implementation and new expanded needs, exercising such available options now provides MTA with considerable financial benefit.

**FINANCIAL IMPACT**

The required funding of \$4,375,202 for capital equipment is within the total San Fernando Valley Bus Rapid Transit Project forecast of \$329,500,000. There is no impact on the FY03 budget. Expenditures for this change order will occur in FY04 and FY05. Since this is a multi-year contract, the cost center manager and Deputy Chief Executive Officer will be accountable for budgeting the cost of maintenance, \$3,079,642, in future years, including any options exercised. The UFS project budget of approximately \$93 million is not affected by this action.

**ALTERNATIVES CONSIDERED**

As an alternative, MTA staff considered delaying the purchase of the project equipment. However, this option would increase the cost to MTA by approximately \$2 million.

The last alternative MTA staff considered is to purchase an entirely separate system through a separate procurement. However, this approach would potentially result in a more expensive and incompatible system to the UFS, and is contrary to the MTA Board's directive to implement a seamless, regional fare collection system for Los Angeles County.

**NEXT STEPS**

Information regarding the San Fernando Valley Bus Rapid Transit Project will be included as part of the staff's quarterly progress reports for the entire UFS Project and the San Fernando Valley Bus Rapid Transit Project Quarterly Report.

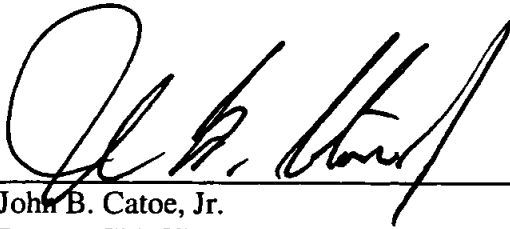
**ATTACHMENTS**

- A Vendor Summary
- A-1 Procurement History
- A-2 List of Subcontractors

Prepared by:

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Bus Rapid Transit Project



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John B. Catoe, Jr.  
Deputy Chief Executive Officer



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Roger Snoble  
Chief Executive Officer

**BOARD REPORT ATTACHMENT A  
PROCUREMENT SUMMARY**

**UNIVERSAL FARE SYSTEM**

1.	Contract Number: OP-02-4610-10		
2.	Recommended Vendor: Cubic Transportation Systems, Inc.		
3.	Cost/Price Analysis Information:		
	A. Proposed Price C/O 3: NTE \$ 7,572,290	Recommended Price C/O 3: NTE \$ 7,454,844	
	B. Details of Significant Variances are in Attachment A-1.D: None		
4.	Contract Type: Firm Fixed Price		
5.	Procurement Dates: A. Issued: July 24, 2002 B. Advertised: N/A C. Pre-Proposal Conference: N/A D. Proposal Due: August 29, 2002 E. Pre-Qualification Completed: N/A F. Conflict of Interest Form Submitted to Ethics: N/A		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: 3% DBE Goal N/A	Date Small Business Evaluation Completed: January 31, 2002N/A	
	A. Small Business Commitment: 5.65%		
57.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: N/A
68.	Evaluation Information: N/A		
	B. Evaluation Methodology: N/A		
79.	Protest Information:		
	A. Protest Period End Date: N/A		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
81 0.	Contract Administrator: Donald C. Dwyer	Telephone Number: 922-6387	
9.1 1.	Project Manager: Jane Matsumoto	Telephone Number: 922-3045	

**BOARD REPORT ATTACHMENT A-1  
PROCUREMENT HISTORY**

**UNIVERSAL FARE SYSTEM**

**A. Background on Contractor**

Cubic Transportation Systems, Inc., a wholly owned subsidiary of Cubic Corporation, is located in San Diego, California. Cubic Transportation Systems, Inc. (Cubic) has been in business since 1949. Cubic specializes in two areas of business: Defense and Transportation. Cubic is currently under contract with the MTA to perform maintenance on rail ticket vending machines. Separately, all the fare boxes currently used by the MTA were provided by Cubic in the early 1990's. Cubic's performance under these contracts has been satisfactory. Cubic has provided fare collection equipment to transit agencies throughout the United States and the World including New York City Transit, Chicago Transit Authority, Washington Metropolitan Area and London Underground Limited.

**B. Procurement Background**

During the February 2002, Board Meeting, the MTA Board awarded the Universal Fare System (UFS) Contract to Cubic Transportation System, Inc. (Cubic). Cubic has agreed to extend core contract pricing for UFS equipment to other MTA projects and to the Regions Municipal Operators if the orders can be placed by January 31, 2003. The pricing in the core contract is heavily discounted due to the large volume of equipment ordered. Orders for equipment placed after January 31, 2003 would be subject to the higher unit prices identified in the Contract as Additional Equipment – Variable Quantities Options.

**Board Authorization Summary:**

Original Contract:	\$84,003,444
Allowance for Changes*:	\$5,000,000
Total Board Authorization:	\$89,003,444
Change Order No. 3	\$7,454,844
Revised Total	\$96,458,288

\*The \$5,000,000 was approved by the MTA Board for changes to existing core contract work for the Pasadena Gold Line and Metro Bus and Rail Projects. This is a new project and additional funding is required for purchasing additional fare collection equipment.

**C. Evaluation of Proposals**

N/A

**D. Cost/Price Analysis Explanation of Variances**

The Contractor's proposal is comprised of costs for equipment for which unit prices are set by Contract and other costs, including modifications to the central computer, site preparation, installation and testing, manuals, training, project management, engineering, interim and long term maintenance and other ancillary costs that are specific to the SF BRT project. The costs for equipment are fair and reasonable based on price analysis performed on the original contract. All other costs were determined to be fair and reasonable based on the independent estimate, audit and cost/price analysis.

**BOARD REPORT ATTACHMENT A-2 – LIST OF SUBCONTRACTORS  
UNIVERSAL FARE SYSTEM**

**PRIME CONTRACTOR – Cubic Transportation System, Inc.**

**SMALL BUSINESS COMMITMENT**

American Alloy Fabrication, Inc.  
Lows Enterprises, Inc.  
Priority MFG., Inc.  
Robnett Electric  
TechProse  
J-Tec Metal Products  
KLJ, Inc.  
Komex

**OTHER SUBCONTRACTORS**

GFI Genfare  
Mercury Ems  
Ics Advent  
Mars ElectronicsAllbright Technologies

**SMALL BUSINESS PARTICIPATION**

This Contract has a DBE participation goal of 5.65%. The contract was awarded on March 12, 2002 to Cubic Transportation, Inc. and is 0% complete. Current DBE attainment<sup>1</sup> based on the current contract amount<sup>2</sup> is 0%. Current DBE participation<sup>3</sup> based on total actual amount paid-to-date to contractor and total actual amount paid-to-date to DBEs is 0%. Each of the listed DBE subcontractors will perform on the Contract as listed.

<b>Original Award Amount</b>	<b>\$89,003,444.00</b>
<b>Current Contract Value<sup>2</sup></b>	<b>-0-</b>
<b>Total Actual Amount Paid to Date to Prime</b>	<b>-0-</b>

<b>Subcontractor</b>	<b>Commitment</b>	<b>Current Attainment<sup>1</sup></b>	<b>Current Participation<sup>3</sup></b>	<b>Current Status</b>
American Alloy Fabrication, Inc.	.25%	0%	0%	Awarded
Lows Enterprises, Inc.	.13%	0%	0%	Awarded
Priority MFG., Inc.	.93%	0%	0%	Awarded
Robnett Electric	2.53%	0%	0%	Awarded
TechProse	.40%	0%	0%	Awarded
J-Tec Metal Products	.13%	0%	0%	Awarded
KLJ, Inc.	.25%	0%	0%	Awarded
Komex	1.03%	0%	0%	Awarded
<b>TOTAL</b>	<b>5.65%</b>	<b>0%</b>	<b>0%</b>	<b>New Award</b>

<sup>1</sup>Current Attainment = Total Actual Amount Paid-to-Date to DBE Subs ÷ Total Current Contract Amount

<sup>2</sup>Current Contract Amount = Original Contract Value + Contract Cost Modifications

<sup>3</sup>Current Participation = Total Actual Amount Paid-to-Date to DBE Subs ÷ Total Actual Amount Paid-to-Date to Prime