



**OPERATIONS COMMITTEE  
JUNE 16, 2005**

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

**ACTION: AUTHORIZE AN INCREASE TO THE CUBIC TRANSPORTATION SYSTEMS, INC. (CTS) CONTRACT TO PURCHASE EQUIPMENT FOR THE METRO GOLD LINE EASTSIDE EXTENSION PROJECT**

**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 for the use on the Metro Gold Line Eastside Extension Project in the amount not-to-exceed \$3,808,722 increasing the total contract value from \$98,206,431 to \$102,015,153.

**RATIONALE**

The UFS contract with CTS provides new electronic Ticket Vending Machines (TVMs), Stand Alone Validators (SAVs), and other ancillary equipment to automate fare collection on all LACMTA bus and rail service. In accordance with the current implementation of the UFS, any 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 Contract was awarded to CTS on March 7, 2002, in the amount of \$84,003,444 and the Board authorized change orders not to exceed \$5,000,000, for a total contract value of \$89,003,444. The contract included the ability to purchase additional equipment quantities at option bid unit prices for 1,095 days after issuance of the Notice to Proceed (March 12, 2002), or March 12, 2005. Under separate agreement, CTS extended pricing validity for Metro Gold Line Eastside Extension equipment until June 30, 2005.

As part of the cost reduction measures in establishing the Full Funding Grant Agreement (FFGA) budget for the Metro Gold Line Eastside Extension Project, the total number of TVMs was reduced from 30 to 16 by deferring the purchase of 14 TVMs. In March 2005, the Board approved additional funding under Project 800288 to allow the total number of TVMs to be restored to 30. TVMs for the Metro Gold Line Eastside Extension were not included in

the UFS contract base buy amount above. Therefore, exercising the option in the contract is necessary to purchase all 30 TVMs for the Metro Gold Line Eastside Extension Project. Purchasing the TVMs and SAVs now ensures the appearance and configuration of the UFS devices on the Metro Gold Line Eastside Extension is the same as the other equipment being purchased for the system. It also provides the agency considerable financial benefit.

Approval of this recommendation adds 30 TVMs, 21 SAVs, wiring provisions for an additional 39 future SAV locations, and other ancillary equipment. The TVMs and SAVs will be distributed along the eight Metro Gold Line Eastside Extension stations in accordance with a “needs assessment” performed by Booz-Allen & Hamilton. All stations will receive at least 2 TVMs and SAVs, with additional equipment to be installed at the more heavily used stations, including Union Station.

### **FINANCIAL IMPACT**

The total required funding of \$3,808,722 is included within the Metro Gold Line Eastside Extension Project 800088 and Metro Gold Line Eastside Extension Enhancement Project 800288. The funding breakdown between each project follows.

Funding of \$2,031,318 is within Cost Center 8510 (Construction Contracts/Procurement) under Project 800088 (Metro Gold Line Eastside Extension Project), Line Item No. 53102 (Acquisition – Equipment). The adopted life of project budget of \$898,814,088 is not impacted by this action.

Funding of \$1,777,404 is within Cost Center 8510 (Construction Contracts/Procurement) under Project 800288 (Metro Gold Line Eastside Extension Enhancement Project), Line Item No. 53102 (Acquisition – Equipment). The adopted life of project budget of \$18,000,000 is not impacted by this action.

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

Potential for Cost Recovery:             Yes                             No                             N/A

### **ALTERNATIVES CONSIDERED**


As an alternative, staff considered delaying the purchase of the project equipment. However, this option would potentially increase the cost to LACMTA.

The last alternative 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 Board’s directive to implement a seamless, regional fare collection system for Los Angeles County.

## ATTACHMENTS

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

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Eastside Extension Project  
Ram Krishna, P.E., Director, Project Engineering, Systems  
Donald Dwyer, Contracts Administration Manager  
Jane Matsumoto, UFS Project Manager



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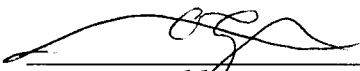
Richard Thorpe  
Chief Capital Management Officer



for

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John Catoe  
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 NTE \$ 4,233,571	Recommended Price: NTE \$ \$3,808,722	
	B. Details of Significant Variances are in Attachment A-1.D: None		
4.	Contract Type: Firm Fixed Price		
5.	Procurement Dates: A. Issued: December 21, 2004 B. Advertised: N/A C. Pre-Proposal Conference: N/A D. Proposal Due: January, 2005 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: December, 2004N/A	
	A. Small Business Commitment: 5.65%		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: N/A
8.	Evaluation Information: N/A		
	B. Evaluation Methodology: N/A		
9.	Protest Information:		
	A. Protest Period End Date: N/A		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
10.	Contract Administrator: Donald C. Dwyer	Telephone Number: 922-6387	
11.	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 LACMTA to perform maintenance on rail ticket vending machines. Separately, all the fare boxes currently used by the LACMTA 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**

At its February 2002 meeting, the Board awarded the Universal Fare System (UFS) Contract to Cubic Transportation System, Inc. (Cubic). There are provisions within the Contract to purchase additional fare collection equipment for other Metro projects at predetermined rates in accordance with pricing described in the Contract section, "Additional Equipment -- Variable Quantities Options. Equipment shall be manufactured and stored at Cubic facilities for a period of three years. During that three-year period, Cubic shall store, maintain and update the equipment to keep it current with other installed equipment. Installation of the equipment will occur in accordance with the Metro Gold Line Eastern Extension construction schedule.

On December 21, 2004, Change Request No. 61 was issued to the Contractor to add fare collection equipment for the Metro Gold Line East Side Extension Project. The request included a base quantity of 16 Ticket Vending Machines (TVMs) and an option to add an additional 14 TVMs. The request also included 39 Stand Alone Validators (SAVs) and other ancillary equipment. On January 19, 2005 Cubic submitted a proposal for both base and optional quantities. The proposal was reviewed by Booz-Allen & Hamilton for technical compliance and by Management Audit Services for cost analysis. In April 2005, the Metro Gold Line Eastern Extension Management Team directed Procurement, based on Board direction, to proceed with the purchase of both base and optional quantities for Ticket Vending Machines. On April 26, 2005, a revised proposal with reduced unit rates for the larger quantity of Ticket Vending Machines was received from Cubic. On the basis of MASD's audit and technical analysis, successful negotiations with Cubic were completed on May 17, 2005.

**C. Evaluation of Proposals**

Not Applicable

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

Costs are determined to be fair and reasonable based on independent estimate, audit and negotiation.

**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 Electronics Allbright 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.

Original Award Amount	\$89,003,444
Current Contract Value <sup>2</sup>	\$98,206,431-
Total Actual Amount Paid to Date to Prime	-0-

Subcontractor	Commitment	Current Attainment <sup>1</sup>	Current Participation <sup>3</sup>	Current Status
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