

**Metro**Los Angeles County
Metropolitan Transportation AuthorityOne Gateway Plaza
Los Angeles, CA 90012-2952213.922.2000 Tel
metro.net**CONSTRUCTION COMMITTEE
APRIL 16, 2015****SUBJECT: FARE RETRIEVAL SYSTEM AT THE DIVISION 13 BUS OPERATIONS
AND MAINTENANCE FACILITY (DIVISION 13)****ACTION: AUTHORIZATION FOR CONTRACT MODIFICATION****RECOMMENDATION**

Authorize the Chief Executive Officer (CEO) to execute a Contract Modification for Contract OP02461010 with Cubic Transportation Systems, Inc. (Cubic) in an amount \$99,401, increasing total value of the contract from \$252,854,827 to \$252,954,228.

ISSUE

This action is required to provide for a complete installation of garage equipment for the fare retrieval system at Division 13. Some of the garage equipment was originally included as part of the Central Cash Counting Facility (CCCF) fare retrieval system. Without a complete fare retrieval system, Division 13 will be unable to probe and vault the fareboxes and remove the currency from the cashboxes. The CCCF was value engineered out of the contract documents due to funding limitations and as a result this garage equipment was inadvertently omitted from the project. Metro will issue a change order to Cubic to integrate this work back into the Division 13 project. Contract Modification in the amount of \$99,401 is needed to for the implementation of the Division 13 fare retrieval system's garage equipment.

DISCUSSION

The Division 13 project team discovered during construction that the fare retrieval system was incomplete due to the inadvertent omission of the CCCF equipment. After evaluating various options to reincorporate the omitted garage equipment, a change order to Cubic was selected as the best and most expedient option.

The change order will provide for a complete installation of garage equipment required at Division 13, including furnishing computer equipment and materials necessary for a complete and operational fare retrieval system, in conjunction with vaulting equipment being furnished by the Division 13 contractor to support a total of four fueling lanes. Cubic will install the fare retrieval server system, the vaulting and probe equipment and will provide and install wiring/cabling between components in the data room and vault and probe locations. Cubic will also perform a survey to determine installation of a wireless access point for optimal bus coverage for communication between the garage computer and the bus fareboxes. The Division 13 contractor already installed the infrastructure of electrical conduit, boxes and other fare collection components.

The contract modification of \$99,401 includes procurement and installation of the fare collection equipment by Cubic. All work will be consistent with previous fare retrieval systems performed by Cubic at Metro's existing Bus Divisions. Cubic will coordinate the scope of work defined in the change notice with the Division 13 project team.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an impact on established safety standards.

FINANCIAL IMPACT

The funding for this change order will come from the Division 13 budget, Capital Project 202001, Cost Center 8510, Account 53101 for Acquisition of Building and Structures. There are sufficient funds within the Life-of-Project (LOP) budget for this expenditure, and the LOP for the project will not be changed. The Project Manager and Executive Director, Engineering and Construction will be responsible for budgeting the costs during this fiscal year.

Impact to Budget

The funds required for this specific action are included within the Division 13 contingency budget. No additional funds are being requested and the LOP will not be affected.

The sources of funding for the Board approved Division 13 LOP budget are Federal 5307 discretionary grants, Proposition 1B PTMISEA, and TDA Article 4 funds which have been previously approved by the Board for this project. As such, the funds are only available for this capital project and are not eligible for operational uses.

ALTERNATIVES CONSIDERED

The Board may choose not to authorize contract modification for contract OP024161010. This alternative is not recommended because without the installation of the omitted garage equipment, Division 13 would have an incomplete and non-operational fare retrieval system. This would leave Division 13 with the inability to probe and vault fareboxes to retrieve fares thereby significantly impacting Metro's revenue operations.

NEXT STEPS

Upon approval, procurement will issue the contract modification with Cubic Transportation System, Inc for the necessary garage equipment and corresponding installation costs.

ATTACHMENTS

- A. Procurement Summary
- B. Modification Log

Prepared by: Manuel Gurrola, Project Manager (213) 922-8889
Tim Lindholm, Executive Officer (213) 922-7297


Stephanie Wiggins
Executive Director, Vendor/Contract Management


Bryan Pennington
Executive Director, Engineering and Construction


Arthur T. Leahy
Chief Executive Officer

**PROCUREMENT SUMMARY
UNIVERSAL FARE SYSTEM**

1.	Contract Number: OP02461010		
2.	Contractor: Cubic Transportation Systems, Inc.		
3.	Mod. Work Description: Division 13 Garage Equipment Installation		
4.	Contract Work Description: Universal Fare System		
5.	The following data is current as of: March 16, 2015		
6.	Contract Completion Status		Financial Status
	Contract Awarded:	3/7/02	Contract Award Amount: \$84,003,444
	Notice to Proceed (NTP):	3/7/02	Total of Modifications Approved: \$168,851,383
	Original Complete Date:	9/01/07	Pending Modifications (including this action): \$13,457,421
	Current Est. Complete Date:	7/01/20	Current Contract Value (with this action): \$252,954,228
7.	Contract Administrator: Tamara Reid		Telephone Number: (213) 922-7215
8.	Project Manager: David Sutton		Telephone Number: (213) 922-5633

A. Procurement Background

This Board Action is to approve Modification No. 125 issued to provide garage equipment for the fare retrieval system at Division 13.

This contract modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a Firm Fixed Price.

A summary of contract modifications, including this modification, is provided in Attachment B below.

B. Cost/Price Analysis

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

Proposed Amount	Metro ICE	Negotiated Amount
\$99,401	\$400,000	\$99,401

C. Small Business Participation

Cubic Transportation Systems, Inc. has a Disadvantaged Business Enterprise participation commitment of 5.65%. The project is 96.52% complete. Cubic Transportation's current DBE participation is 8.15%, which exceeds their DBE commitment.

SMALL BUSINESS COMMITMENT	DBE 5.65%	SMALL BUSINESS PARTICIPATION	DBE 8.15%
---------------------------	-----------	------------------------------	-----------

	DBE Subcontractors	Ethnicity	% Committed	Current Participation ¹
1.	American Alloy Fabrication, Inc.	Caucasian	0.25%	0.56%
2.	Lows Enterprises	African American	0.13%	0.06%
3.	TechProse	Caucasian	0.41%	0.11%
4.	Robnett Electrical	African American	2.53%	6.44%
5.	Priority Manufacturing, Inc. (GFI)	Caucasian	0.93%	0.33%
6.	J-Tec Metal Products	Hispanic	0.13%	0.06%
7.	KLI, Inc.	Asian Pacific	0.25%	0.16%
8.	Kormex Metal Craft	Asian Pacific	1.02%	0.44%
		Totals	5.65%	8.16%

¹Current Participation = Total Actual amount Paid-to-Date to Subs + Total Actual Amount Paid-to-date to Prime

D. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) will not be applicable on this contract.

ATTACHMENT B

**CONTRACT MODIFICATION/CHANGE LOG
UNIVERSAL FARE SYSTEM**

Modification No.	Description	Amount
1	Table X-1 Milestone Changes	\$0.00
2	Ticket Vending Machine Soft Keys	\$0.00
3	San Fernando Valley BRT, Additional Quantities	\$7,454,844
4	Modification to General Conditions	\$0.00
5	TVM Third Coin Hopper	\$416,858
6	Stand Alone Validator Video Clips	\$0.00
7	Gold Line Functional Test Waiver	\$0.00
8	Languages Supported	\$0.00
9	Modifications to Compensation & Payment	\$0.00
10	Smart Card to Smart Card Value Transfer	\$0.00
11	SCADA Cable Installation on Gold Line	\$48,476
12	Gold Line Functional Test Waivers	\$0.00
13	Farebox Coin Dejam	\$0.00
14	Change in Milestone Schedule	\$0.00
15	Time Extension, Gold Line	\$0.00
16	Change from Datastream MP5 to Express Metrix	\$0.00
17	Final Design Review, changes in CDRLS	\$0.00
18	Deletion of Printer from Hand Held Validator	-\$35,252
19	Variable Message Sign	\$242,828
20	Changes to Compensation and Payment	\$0.00
21	PCMCIA Card Slot use for WAN	\$0.00
22	Data Transmission System	\$675,000
23	Mifare Card Initialization and Verification	\$9,629
24	Farebox Mounting Adapter for NABI Buses	\$32,485
25	Provide Regional CDCS	\$5,348,335
25.01	Regional CDCS Overhead Rate Adjustment	-\$31,621
25.02	Regional CDCS Acceptance Test Participants	\$0.00
26	Remove Requirement for Focus Groups	-\$111,704
27	Farebox Rotation	\$74,967
28	Metro Gold Line Eastside Extension, Fare Equipment	\$3,808,722
29	Stainless Steel Panels for TVM Alcoves	\$45,521
30	Data Communication Cabling for Orange Line	\$41,560
31	(Not Used)	
32	Additional Spare Part Quantities for Eastside Ext.	\$15,480
33	Mifare Card Functionality on UFS	\$33,105
34	Revisions to Project Schedule	\$0.00
35	OCU Mount	\$87,634

36	(Not Used)	
37	Deductive Change for Line 1.36	-\$33,116
38	Installation of Third TVM and Relocation of Two SAVs and Blue Line Willow Station	\$10,084
39	Upgrade the CDCS System from IB SSA Disk Storage Subsystem to Fiber Disk	\$20,000
40	UFS Equipment for Expo Line	\$5,197,204
41	(Not Used)	
42	(Not Used)	
43	HHV, PMOS and CPOS Interim Maintenance Deductive Change	-\$162,628
44	UFS Additional Quantities for Contracted Services	\$2,499,916
45	Replace Go-Cards with Mi-Fare Cards	-\$1,157,850
46	Relocation of Data Probes and Receive Vaults at Division 7	\$29,787
47	Revisions to US Base and Regional Manuals for Release to ACS	\$46,000
48	Expo Line, Pico Station Infrastructure	\$18,542
49	Relocation of UFS Lab Equipment	\$106,905
50	Expo 7 th and Metro Additional Infrastructure	\$81,719
50.01	Expo 7 th and Metro Infrastructure Deductive change	-\$30,173
51	Handheld Validator Holster	\$6,184
52	Installation and Testing of Farebox at Transportation Concepts	\$16,091
53	Relocate OCUs on Ford Cutaways and MST Buses at Contracted Services	\$79,170
54	Installation of one Farebox and Testing for two Fareboxes at Contracted Services	\$18,842
55	UFS Quantity Adjustments	\$0.00
56	Contracted Bus Service Equipment Change	\$36,704
57	Installation and Acceptance Testing of One Farebox at First Transit	\$3,040
58	Provide UFS Equipment for Expo from Culver City to Venice/Robertson Aerial Station	\$304,246
59	Regional CDCS Electrical Power Reconfiguration	\$17,186
60	Rail Equipment Warranty and Bus Equipment Warranty	\$0.00
61	TAP Enables Turnstile Fare Gates for Rail Stations	\$10,000,000
62	Provide UFS Equipment for Expo Truesdale Station	\$284,167
63	System Support Services	\$33,988,558
63.01	SSS, Additional Costs	\$677,631
63.02	SSS, Orange Line Credits	-\$58,243
63.041	SSS, One-year Extension	\$8,148,263
64	\$5 Dollar Bill handling Unit for Fareboxes and TVMs	\$304,658
65	Installation of Additional SAVs for Eastside Extension	\$34,077
66	Relocation of Wing Gate at MRL Wilshire/Normandie Station	\$18,905

67	(Not Used)	
68	UFS Equipment for Orange Line Extension	\$2,071,845
68.03	UFS Equipment for Orange Line Extension, Credits	-\$10,982
69	Additional TVM at Aviation Greenline Station	\$13,031
70	TAP Card Physical Testing	\$41,844
70.01	TAP Card Physical Testing	\$12,658
71	Concession Light Functionality	\$96,726
72	(Not Used)	
73	API Test Server Imaging	\$45,024
74	Contract Services Relocation	\$33,854
75	Limited Function Sales Office Terminals, Increase Quantity	\$993,795
76	CISCO ASA Acquisition and Implementation for API Test and Production Servers	\$59,209
77	Cubic LU Key Installation	\$69,097
78	Updates Farebox Configuration to Support ARUB Wireless Security Data Transfer	\$40,204
79	Relocation of UFS Test Lab Equipment	\$80,911
80	7 Byte UID Support	\$362,069
81	Fare Gate Fencing Installation Modifications, North Hollywood and Avalon Stations	\$24,004
82	Additional TVM at Hollywood/Western Redline Station	\$15,531
83	Purchase Drive Control Unit Light Validators DCU-LV	\$363,492
84	Install TVMs at Three Metro customer Centers	\$386,680
85	Cubic Modification to Gate Software/Locking Commands	\$111,188
86	UFS Equipment for Expo Phase I Farmdale Station	\$415,184
87	Relocation of TVMs at the Green Line Long Beach Station	\$15,909
88	Mobile Validator Non-Recurring Engineering System Development	\$611,677
89	Expo Pico Station North Platform TVM/SAV Work	\$17,592
90	Deletion of Contract Line Items 1.03, 1.04 & 1.33	-\$64,170
91	Orange Line Installation of 12 Metro Provided SAVs	\$34,483
92	(Not Used)	
93	(Not Used)	
94	System Support Services, Six Year Extension	\$55,000,000
95	UFS Equipment Storage Costs	\$4,129
96	Fare Gating, Three Additional Swing Gates	\$44,611
97	Green Line Faregating Additional Fire Key Switches at Vermont Station	\$8,392
98	Emergency Swing Gate Upgrades	\$252,145
99	Removal of TVM from Wilshire/LaBrea Customer Center	\$4,883
100	Supplying and Supporting a Tern Key Mobile Validator System	\$2,996,113
101	Bus Division Vault Relocation	\$995,940
102	Install One TVM at East Portal Customer Service Center and One at Culver City Station	\$252,905

103	El Monte Bus Facility TVMs	\$474,753
104	Fare Gate Consoles for Expo 2, Colorado/4 th Street Station	\$380,000
105	TVM and SAV Relocations	\$1,521,594
106	Modification to Nextfare to Allow For Segregation of Facility Specific Data	\$647,869
107	Passback Modification	\$70,301
108	UFS PCI Compliance	\$9,015,319
109	Service Provider Support	\$66,777
110	Autoload Segregation by Muni	\$111,707
111	SAV Three Distinct Tones	\$46,634
112	Modify TAP Vending Machine to Improve Purchases	\$250,000
113	ADA TVM Upgrades for CN No. 162 and 150 Replacement TVMs	\$416,815
114 A	UFS Equipment for Gold Line Foothill Extension	\$1,878,756
114 B	UFS Equipment for Expo Phase @	\$3,783,200
115	FBX External Interface Spec Changes	\$20,488
116	Willowbrook Station Blue Line SAVs	\$62,882
117	TAP-In, TAP-In, Transfer Gate	\$88,598
118	Virtual Gate Arrangement of SAVs at Gold Line Union Station Entrance	\$84,964
119	Conversion of Expo 1 Aerial Stations to Fare Gates	\$3,077,952
120	Change in Service Level Agreement for TVM & GC Network Additions at No Cost	\$0
121	Emergency Swing Gate External Alarm Mode	\$266,271
122	Installation of Colorado & 4 th Faregates & ESGs	\$163,143
	Total	\$168,851,383
WACN 163	UFS Global Network, Change for Credit/Debit Processing at TVM	\$40,000
WACN 165	MetroLink Integration Support	\$50,000
WACN 181	Metro Network Assistance	\$50,000
WACN 190	Relocate One TVM From Hawthorne to Hollywood	\$40,000
WACN 209	MetroLink Support for LU Encoding	\$42,000
Pending Mod 123	Virtual Server Upgrade and Hosting	\$1,200,000
Pending Mod 124	Orange Line Fare Gates	NTE \$4,992,649
Pending Mod 125	Division 13 Bus Operations TVMs	\$99,401
Pending Mod 126	(3) TVMs at MRL – MOL North Hollywood West Entrance	\$577,401
Pending Mod 127	(54) TVMs at key Rail Stations	NTE \$6,361,000
Total with Pending Changes		\$182,603,403