

Council Meeting of
May 10, 2011

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the Council:

SUBJECT: Transit – Approve agreement amendment for installation of new bus fareboxes

Expenditure: Not to exceed \$1,208,777

RECOMMENDATION:

Recommendation of the Transit Director that City Council approve a contract amendment with Cubic Transportation Systems, Incorporated for the installation of new fareboxes on Transit buses, at a cost not to exceed \$1,208,777.

FUNDING

Funding is available in Federal Transit Administration (FTA) Section 5307 capital grants CA-90-186 and CA-90-105.

BACKGROUND/ANALYSIS:

On March 18, 2003, the Torrance City Council approved an Agreement (C2003-056) with Cubic Transportation Systems, Incorporated to install new fareboxes on all transit buses. This installation aligns Torrance Transit with the Los Angeles County Metropolitan Transportation Authority's (LACMTA) plan to establish a Universal Fare System in the region. Other neighboring transit agencies and cities will also participate in this project by installing these new fare boxes.

Torrance Transit is the next regional transit agency scheduled for farebox installation. ATTACHMENT A is an Amendment submitted by Cubic to revise the pricing for this project. When initially conceived and planned for in early 2003, it was estimated that the project would cost \$1,315,995 to complete. After careful review and planning by Transit staff in 2011, it was concluded that the project could instead be completed for \$1,208,777 (a savings of \$107,218). All other terms and conditions in the contract remain the same.

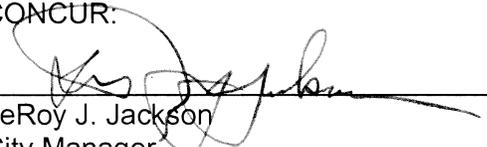
Installation of the new fareboxes is scheduled for later Summer of 2011 and should begin service within a few days of installation and testing. Transit is pleased that these new fareboxes will accompany our new bus fleet in serving the Torrance Community.

Respectfully submitted,



Kim Turner
Torrance Transit Director

CONCUR:



LeRoy J. Jackson
City Manager

Attachment: A) Amendment to Agreement C2003-056



Contract No. 2003-056

Amendment No. 1

Universal Fare System

This Contract Agreement Amendment (hereinafter referred to as "Amendment") is made and entered into as of _____ 2011, by and between City of Torrance ("Torrance"), with its principal place of business at 20500 Madrona Avenue, Torrance, CA 90503, and Cubic Transportation Systems, Inc., a California Corporation, with its principal place of business at 5650 Kearny Mesa Road, San Diego, California 92111 ("Contractor"). Torrance and the Contractor are sometimes individually referred to as "Party" and collectively as "Parties".

WHEREAS, on March 24, 2003, the Parties entered into an Affiliated Agency Universal Fare System Contract wherein the Contractor agreed to provide certain fare collection equipment to Torrance; and

WHEREAS, Torrance has determined that it is appropriate to revise some of the equipment which the Contractor was originally required to provide; and

WHEREAS, both Torrance and the Contractor have mutually agreed to revise certain equipment quantities and prices originally procured under Contract No. 2003-056, with the final Contract quantities, services and prices documented in Exhibit 1 to this Amendment; and

WHEREAS, Torrance has agreed to pay a revised Contract value to the Contractor as outlined in Exhibit 1 to this Amendment; and

WHEREAS, the parties have agreed upon a revised Project Schedule that is documented in Exhibit 2 to this Amendment; and

WHEREAS, the parties have determined that it is appropriate to modify two of the Modifications to Special Provisions set forth in the original Contract.

NOW THEREFORE, the Parties desire to amend the original Contract by:

1. By revising the second paragraph of Article II—Compensation to read as follows:

"In consideration of the Work performed, Buyer will pay Contractor a revised Total Contract Price of One Million, Two Hundred Eight Thousand Seven Hundred and Seventy Seven Dollars (\$1,208,777) payable in accordance with the Contract Document entitled COMPENSATION AND PAYMENT PROVISIONS, and all other provision of the Contract that apply to such payment. The Buyer and the Contractor specifically recognize that this amount includes all applicable sales tax for the delivered equipment and services

2. Torrance's Modification to Special Provision SP-10 is revised to read as follows:

"Replace LACMTA address with the following:

CITY

Torrance c/o Torrance Transit
20500 Madrona Avenue
Torrance, CA 90503-2654

3. Torrance's modification to SP-21 is partially revised to read as follows:

"Program Directors and Program Manager

A. Affiliated Agency Program Director and Program Manager shall be the following person or his designee: Kim Turner"

4. Except as modified or changed herein, all of the terms and provisions of Cubic/Torrance Contract 2003-056, dated March 24 2003 Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be duly executed with all the formalities required by law on the date first written above.

Torrance	Cubic Transportation System, Inc
By: _____	By: _____
Signature: _____	Signature: _____
Title: _____	Title: _____
Date: _____	Date: _____

Approved as to Form:
John L. Fellows III
City Attorney

By: _____
Signature: _____
Title: _____
Date: _____

Patrick Q. Sullivan

Exhibit 1 - Torrance Transit Revised Price List

Line Item	Description	Contract Price Line Item	Per Unit Price	Qty	Total Price
1	Implementation Costs				
1a	Program Management:				\$11,725
1b	Contracts:				\$75,075
1c	Non-Recurring Engineering				
	Evaluate farebox, DCU location		\$110	67	\$7,370
	Evaluation Validator location				\$3,000
	System configuration (one database per Muni)				\$13,836
	Engineering support		\$46	67	\$3,082
	RF LAN and garage site evaluation (per garage)		\$5,000		\$5,000
	Warranty, 2-year				\$39,950
1d	Documentation				\$33,764
1e	Training		\$20,260	1	\$20,260
1f	Installation				
	Bus installation farebox & antenna	1.41	\$132	67	\$8,844
	Bus Standalone Validator installation		\$132	0	\$0
	Installation of HQ computer	1.42, 1.43	\$9,144	1	\$9,144
	Site Preparation for Bus Divisions	1.37	\$7,331	1	\$7,331
	Pre- installation Test	1.44	\$89	67	\$5,963
	Acceptance Test		\$89	67	\$5,963
2	Electronic Validating Farebox	1.13	\$7,377	67	\$494,259
3	Personal Data Assistant for Farebox Maintenance Activity	1.15	\$1,197		
4	Farebox Waterproof Covers	1.19	\$116	0	\$0
5a	Revenue Collection Vault (RCV) including One Receiver Each	1.20	\$30,633	0	\$0
5b	Receiver Only (No vault)		\$15,246		
6	Portable Electronic Key (including battery charging unit)	1.21	\$844	1	\$844
7	Mobile Collection Bins	1.22	\$7,275	0	\$0
8	Revenue Audit Unit	1.23	\$7,664	1	\$7,664
9	Division Computer System (S/W)	1.29	\$26,660	1	\$26,660
10	Farebox Data Probe	1.30	\$7,492	2	\$14,984
11	Portable Data Probe System	1.65	\$18,069		
12	New Ranier Board and Tri-Reader (Odyssey Farebox Upgrade)		\$2,839		
13	GFI Ranier Board Pre UFS For Odyssey Farebox		\$2,456		
14	Driver Control Unit (Basic)	4.44	\$1,260		
15a	PR01-1059-2 BUS Validator (BSU) No DCU		\$3,500	0	\$0
15b	BSU NRE		\$271	0	\$0
16	Kit, Installation, Driver Control Unit (Basic)		\$558		
17	Communications Equipment (DCS-CDCS) comm equip		\$2,550	1	\$2,550
18	Data Collection Device (Hand Held Computers)	1.66	\$4,058		
19	Data Collection Device (Software License Fees)		\$1,950		
20	Division Computer System (DCS) Hardware (PC + RF Access Point) (garage)		\$17,927	1	\$17,927
21	Muni HeadQuarter Computer Muni Work Stations S/W Customization				
	Installation		\$6,929		\$6,929
	Customization of App Server for each Muni including:				
	-Report customization (See Attached Note1)				
	-Customize Open View		\$6,929		\$6,929
	-Customize Fare Tables		\$6,929		\$6,929
	Test		\$48,508		\$48,508
	Data Base Partitioning (See Attached Note 3)				
	GUI Customization		\$13,858		\$13,858
	Business Rules Definition		\$48,508		\$48,508
	Load Database with Agency's Routes, Runs, Stops		\$6,929		\$6,929
	Load Database with Agency's Fleet Information:				\$3,842
	-Farebox ID's (See Attached Note 5)				
	-Bus ID's (See Attached Note 5)				
	-Cashbox ID's (See Attached Note 5)				
	and employee CSC Database.		\$13,858		\$13,858
22	Muni HeadQuarter Computer (Server) at CDCS		\$15,000	1	\$15,000
23	Muni Central (without Redundant Server)		\$5,465,725		
24	Full Function Sales Office Terminals	1.26	\$9,610		
25	Spare Parts				\$82,418
26	Magnetic TPU H/W				
27	Magnetic TPU S/W				
28	Receiver Only (No Vault)		\$18,590	2	\$37,180
29	RAM Mounting Hardware Upgrade		\$309	67	\$20,703
30	45U 19"W x 7"H x 3"D Universal 2 post Rack - Aluminium		\$993	1	\$993

Total Price \$1,127,779

Tax rate = 9.75% \$80,998

Total Price with Tax \$1,208,777

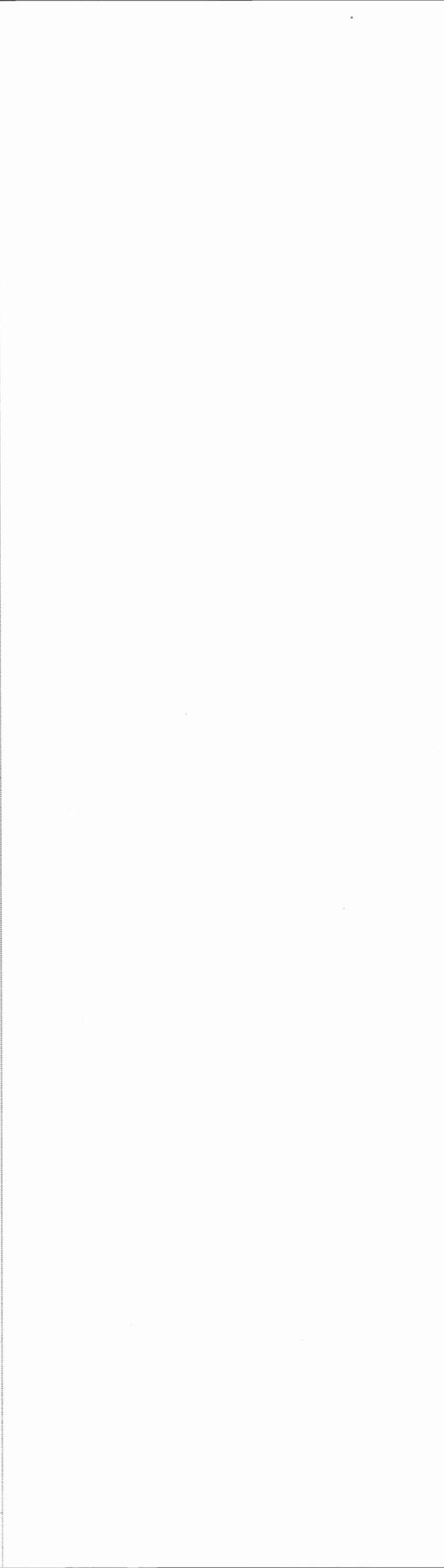
Torrance Transit Installation Schedule

ID	Task Name	Duration	Start	Finish	Calendar
1	Torrance (67 Fareboxes)	175 days	Wed 11/17/10	Tue 7/19/11	7 142128 5 121926 2 19 162330 6 132027 3 101724 1 8 152229 5 121926 3 1017
2	Site Visit/Fit Check	75 days	Wed 11/17/10	Tue 3/1/11	
3	Site Visit and WAP Survey	1 day	Wed 11/17/10	Wed 11/17/10	
4	Farebox Fit Check	1 day	Wed 11/17/10	Wed 11/17/10	
5	Submit Recommended Spares List to Torrance	1 day	Tue 3/1/11	Tue 3/1/11	
6					
7	Installation Plan	77 days	Fri 3/4/11	Mon 6/20/11	
8	Submit Farebox Installation Plan	1 day	Fri 3/4/11	Fri 3/4/11	
9	Submit Wireless Installation Plan	1 day	Fri 3/4/11	Fri 3/4/11	
10	Approval of all Installation Plans	0 days	Tue 4/26/11	Tue 4/26/11	
11	Order and Receive Installation Hardware	8 wks	Tue 4/26/11	Mon 6/20/11	
12					
13	RCDCS	60 days	Wed 2/16/11	Tue 5/10/11	
14	Receive/Verify Fare Table Data, Bus Numbers, Employee IDs and Line #s	20 days	Wed 2/16/11	Tue 3/15/11	
15	Nextiare Setup	15 days	Tue 4/5/11	Mon 4/25/11	
16	Input Customer Info (employees, routes, runs)	10 days	Tue 4/5/11	Mon 4/18/11	
17	Configure Nextiare	10 days	Tue 4/19/11	Mon 5/2/11	
18	Deliver Training Farebox	6 days	Tue 5/3/11	Tue 5/10/11	
19					
20	Farebox, Garage Installation	18 days	Fri 6/24/11	Tue 7/19/11	
21	Pre-Installation Meeting	1 day	Fri 6/24/11	Fri 6/24/11	
22	Infrastructure Installation	5 days	Mon 6/27/11	Fri 7/1/11	
23	Receive Storage Containers/Equipment	1 day	Mon 6/27/11	Mon 6/27/11	
24	Pull Cables, Install WAP, Receiver Vaults and Garage Computer	5 days	Mon 6/27/11	Fri 7/1/11	

Task Milestone External Tasks
Split Summary External Milestone
Progress Project Summary Deadline

Torrance Transit Installation Schedule

ID	Task Name	Duration	Start	Finish	pv '10	Dec '10	Jan '11	Feb '11	Mar '11	Apr '11	May '11	Jun '11	Jul '11
25	Setup LAN and Test Connection	2 days	Thu 6/30/11	Fri 7/1/11	7	14	21	28	5	12	19	26	3
26	UFS Farebox Installation	5 days	Tue 7/5/11	Mon 7/11/11									
27	On-Site Prep Fareboxes for Installation	2 days	Tue 7/5/11	Wed 7/6/11									
28	Set Up Work Stations	1 day	Fri 7/8/11	Fri 7/8/11									
29	Begin Farebox Installation	0 days	Fri 7/8/11	Fri 7/8/11									
30	Coordinate IATs with Metro	0 days	Fri 7/8/11	Fri 7/8/11									
31	Complete Farebox Installation	1 day	Mon 7/11/11	Mon 7/11/11									
32	Spare Farebox IATs and Infrastructure IATs	4 days	Tue 7/12/11	Fri 7/15/11									
33	Training	16 days	Tue 6/28/11	Tue 7/19/11									
34	Operator Training	1 day	Tue 6/28/11	Tue 6/28/11									
35	Bus System Components Training	1 day	Wed 6/29/11	Wed 6/29/11									
36	Revenue Equipment Training	1 day	Thu 6/30/11	Thu 6/30/11									
37	Data System/GCS/Hummingbird Reports Training	1 day	Tue 7/19/11	Tue 7/19/11									



Task Milestone External Tasks External Milestone Deadline

Split Summary Project Summary

Progress

Contract Form

Between
 CITY OF TORRANCE
 3031 TORRANCE BOULEVARD
 TORRANCE, CA 90503

CONTRACT NO.:

And

CUBIC TRANSPORTATION SYSTEMS, INC.
 5650 KEARNY MESA ROAD
 SAN DIEGO, CA 92111

UNIVERSAL FARE SYSTEM

This Affiliated Agency Universal Fare System Contract (Contract), dated as of MARCH 18, 2003, is entered into by and between the City of Torrance (Buyer) and Cubic Transportation Systems, Inc., a California corporation (Contractor).

RECITALS

- A. In December 1998, the Los Angeles County Metropolitan Transportation Authority (MTA) Board established the Universal Fare System (UFS) as a regional fare collection system of ticket vending machines, validating bus fareboxes, stand alone validators, ticket processing units, revenue collection equipment, central data collection system, ancillary equipment, spare parts, services and all related software.
- B. On August 23, 2001, the MTA Board approved the adoption of the "smart card" as the regional fare media.
- C. On February 28, 2002, the MTA Board awarded Contract OP-02-4610-10 to Cubic Transportation Systems, Inc. for a Universal Fare System.
- D. Contract OP-02-4610-10 ("MTA Contract") is designed to create a regional fare collection system for the MTA and municipal transit operators operating within the Los Angeles County region, described herein and in the Contract as "Affiliated Agencies".
- E. The "Affiliated Agencies" desire to participate in the creation of the regional UFS by entering into separate contracts with Cubic Transportation Systems, Inc. In order to facilitate cooperative planning and coordination relating to the development of the UFS, these contracts will follow and incorporate the terms and conditions of the MTA Contract, except as expressly indicated herein.
- F. City of Torrance is the Affiliated Agency referenced herein.
- G. On December 9, 2002, Cubic submitted a proposal specifically for the establishment of a regional Universal Fare System for City of Torrance, which was further amended on February 6, 2003 (collectively referred to herein as "Proposal"). This Proposal is attached herein and incorporated herein by this reference.

Universal Fare System Contract
 City of Torrance & Cubic Transportation Systems
 Page 2 of 4

NOW THEREFORE, in consideration of the foregoing, all of which are incorporated as a part of this Contract, and the mutual covenants of the parties as set forth below, the parties hereto hereby further agree as follows:

ARTICLE I: CONTRACT DOCUMENTS AND ORDER OF PRECEDENCE:

This Contract incorporates by reference and makes a part hereof the MTA Contract, except to the extent of the modifications to the MTA Contract set forth herein. City of Torrance acknowledges that it has reviewed the MTA Contract and agrees to be bound by its provisions, except as otherwise provided herein. For the purpose of this Contract, references to "MTA" in the MTA Contract shall also be intended to refer to City of Torrance. In the event of any inconsistency or conflict between the provisions of the MTA Contract and the Modifications thereof set forth in Article IV of this Contract, the Modifications are deemed to supercede and prevail.

The Contract consists of the following Contract Documents, which are listed below in (descending) order of precedence:

1. Contract Form (Articles I – VI)
2. Modifications to General Conditions, Part B
3. Modifications to Special Provisions, Part C
4. Modifications to Compensation and Payment Provisions, Part D
5. Modifications to the Technical Specifications, Part E
6. Exhibit A: Software License Agreement – Exhibit A
7. Exhibit B: UFS Price Sheet
8. Exhibit C: Certificate of Subcontractor Commitment
9. Other Documents incorporated herein by reference, including Affiliated Agency proposal and LACMTA UFS Contract No. OP-02-4610-10.

ARTICLE II: COMPENSATION

Except as may be otherwise expressly provided, and subject to the terms and conditions of this Contract, Buyer will pay Contractor the Total Contract Price set forth below as compensation in full for the System, which shall include without limitation, all performance of the Work, as defined in the Technical Specifications, all System Components and all other responsibilities and obligations of the Contractor in connection with the Work, all damages and losses to Contractor arising out of the Work, and all risks of every description that are associated with the Work. Except as may otherwise expressly provided in this Contract, there shall be no other compensation, in excess of the Total Contract Price, payable to the Contractor.

Universal Fare System Contract
 City of Torrance & Cubic Transportation Systems
 Page 3 of 4

In consideration of the Work performed, Buyer will pay Contractor a Total Contract Price, Not to Exceed, of one million, three hundred fifteen thousand, nine hundred ninety five dollars (\$1,315,995.00) payable in accordance with the Contract Document entitled COMPENSATION AND PAYMENT PROVISIONS, and all other provisions of the Contract that apply to such payment.

ARTICLE III: PERIOD OF PERFORMANCE

1. **Effective Date:** The Effective Date of this Contract shall be the date the Contract is subscribed by both parties, i.e., the Contract Award Date.
2. **General:** The term of this Contract shall commence upon the Effective Date and shall continue for a period of 150 days after Notice to Proceed, thereafter (the "Term"), unless sooner terminated as provided herein.
3. **Definition of Term:** As used throughout this Contract, the word "Term" shall include any Transfer Period, as defined below and in General Conditions Clause GC-31.
4. **Transfer Function:** Upon expiration or termination of this Contract for any reason, with cause or without cause, Contractor shall be responsible for the smooth transition of the System and Services to a third party. The transfer shall be in accordance with the requirements of this Contract. Contractor shall commence the transfer not later than fifteen (15) days after Buyer's written request. Such transfer shall be at no cost to the Buyer.
6. **Notice to Proceed:** Except for Contractor activities that are required to be completed prior to Buyer's issuance of an NTP, the Contractor is not authorized to perform work under the Contract until the effective date set forth in the Notice to Proceed, "NTP Date", unless specifically authorized in writing by the Buyer. NTP will be issued no later than thirty (30) days after completion of all Contractor activities required to be completed prior to issuance of NTP, including, without limitation, receipt by Buyer of any Contractor's bonds and required insurance certificate(s).
7. **Commencement of Work:** Upon the Effective Date set forth in the NTP, the Contractor shall commence Work and shall diligently prosecute the Work to completion within the time limits specified in this Contract.

ARTICLE IV: APPLICATION OF AND MODIFICATIONS TO UFS CONTRACT DOCUMENTS

References in this Contract to the MTA and to Contractor's obligations thereof shall extend to the Buyer unless specifically excluded as indicated below:

General Conditions: (See Attached Modifications, Part B)

Special Provisions: (See Attached Modifications, Part C)

Compensation and Payment: (See Attached Modifications, Part D)

Universal Fare System Contract
City of Torrance & Cubic Transportation Systems
Page 4 of 4

Technical Specifications: (See Attached Modifications, Part E)

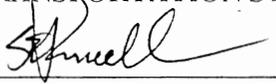
ARTICLE V: ENTIRE CONTRACT

This Contract, which consists of these Articles, including the Recitals, and the Contract Documents described in Article I, and all documents incorporated herein or in any Contract Document by inclusion or by reference, constitutes the complete and entire Contract between the Buyer and Contractor and supersedes all previous requests for proposals, proposals, agreements or any other documents whatsoever, and any other prior representations, understandings, communications, commitments, agreements or proposals, oral or written, relating to the subject matter of this Contract.

ARTICLE VI: SIGNATURES

IN WITNESS WHEREOF, the parties to this Contract have caused this Contract to be subscribed on their behalf by their duly authorized Officers.

CUBIC TRANSPORTATION SYSTEMS, INC.



S. E. Purcell
Vice President, Contracts

3/24/2003
Date

Tax ID No.: 95-2773786

CITY OF TORRANCE



Dan Walker
Mayor

ATTEST:



Sue Herbers
City Clerk

APPROVED AS TO FORM:

JOHN L. FELLOWS III
City Attorney

By: 

Date

**MODIFICATIONS TO
GENERAL CONDITIONS, PART B**

General

- a. All references to "MTA" herein shall also be intended to refer to the Affiliated Agency. In the event of any inconsistency or conflict between the provisions of the MTA Contract and the Modifications thereof set forth in Article IV of the Contract Articles, the Modifications set forth in Article IV of the Contract Articles are deemed to supercede and prevail.
- b. All references to Affiliated Agencies refer to City of Torrance.
- c. All references to a rail transit system, rail locations, rail transportation system, and pavement tracks are not applicable to this contract.

GC-1 Glossary of Terms

- a. All actionable references to "the contract" (i.e., scheduling, critical path, milestones, etc.) shall mean this UFS contract with the Affiliate Agency.
- b. All references to Chief Executive Officer or CEO will be replaced by City Manager or his/her designee.
- c. The term Contract Documents includes the Contract Articles.
- d. The term First Productive Use will refer to the first use of the System by the MTA not the Affiliated Agency.
- e. The Notice of Completion will be issued by Affiliate Agency upon satisfactory completion of the Work.

GC-3 Contracting Officer and Authorized Representatives

- a. Affiliate Agency's Program Director and Manager will be the City Manager or his/her designee.

GC-8 System Components

- a. Title will be passed to Affiliate Agency upon payment.

GC-9 Performance, Implementation and Support

- B. Implementation. Second paragraph "Implementation Plan" is deleted, as this contract does not include any design work, planning or scheduling.
- G. User Support Forums. This section is deleted.
- H. MTA/Contractor Meetings. References to monthly meetings are deleted and replace with meetings to be held as required.

GC-11 Proprietary Rights

- B. Licensed Software
 1. The executed Software License Agreement in Exhibit GC-1, and applicable Non-Disclosure Agreement, will be executed between Cubic and Affiliated Agency and will become a part of this contract.

GC-25 Audit

Subsection:

- D. First sentence of subsection is modified to read as follows: "All Changed Work, Change Orders and Amendments are subject to audit regardless of value, except as otherwise stated herein."

Add to end of first paragraph:

The following UFS Contract line items shall not be subject to audit:

<u>Regional Price #</u>	<u>LACMTA BAFO</u>	<u>Item</u>
1f	1.41	Farebox installation
1f	1.42	Div. Computer Installation
1f	1.37	Site Prep for Bus Divisions
2	1.13	Farebox
3	1.15	Personal Data Assistant
4	1.19	Farebox Waterproof Cover
5a	1.20	Revenue Collection Vault
6	1.21	Portable Elect Key
7	1.22	Mobile Collection Bins
8	1.23	Revenue Audit Unit
9	1.29	Div. Computer Software
10	1.30	Farebox Data Probe
11	1.65	Portable Data Probe
18	1.66	Hand Held Validator
14	4.44	Driver Control Unit
24	1.26	Full Function Sales Office Terminal

GC-40 Indemnification

A. Grounds for Indemnification

Delete "MTA, its subsidiaries, and any of their respective members, directors, officers, employees and agents,"

Replace with: "City of Torrance, the City Council, each member thereof, present and future, its officers, agents and employees".

**MODIFICATIONS TO
SPECIAL PROVISIONS, PART C**

General

- a. All references to "MTA" or "LACMTA" herein shall also be intended to refer to the Affiliated Agency, where applicable. In the event of any inconsistency or conflict between the provisions of the MTA Contract and the Modifications thereof set forth in Article IV of the Contract Articles, the Modifications set forth in Article IV of the Contract Articles are deemed to supersede and prevail.
- b. All references to Affiliated Agencies refer to City of Torrance, where applicable.

SP-7 Warranty – Revise to read as follows:

- A. General
 1. Cubic shall warrant the System and all aspects of the Work and shall comply with the Standard of Performance as specified in the Contract, including, without limitation, the Technical Specifications.
 2. The Warranty shall include without limitation, all System Components that constitute a part of the System and all labor costs.

B. Product Warranty Coverage

Cubic warrants the products delivered hereunder for a period of two (2) years from the date of final acceptance to be free from defects in material and workmanship. If, within two (2) years from final acceptance of the product, any such product is found to be defective in material or workmanship, Cubic shall repair or replace such defective products at its expense.

For item(s) returned, City shall provide Cubic with an agency maintenance defect report, written notice of claimed defect, within 30 days after the defect becomes apparent to City, and City shall obtain Return Material Authorization Number from Cubic Customer Service Representative prior to shipment to Cubic at Cubic's expense. When a reported defect cannot be verified by Cubic, the event will be handled as an out-of-warranty action.

Cubic shall make available sufficient resources, including replacement and spare System Components and parts, to meet the daily reliability and

availability requirements embodied in the Technical Specifications during warranty repair. Cubic shall respond within forty-eight (48) hours from the time Cubic receives telephonic notice from City of a System Component or part failure. Cubic shall, at no charge, insure that all System Components and parts needing replacement can be replaced, whether by Cubic or by the appropriate third party supplier, within ten (10) days of receiving the initial notice of a part or System Component failure.

Upon failure to provide adequate resources to support the reliability and availability requirements embodied in the Technical Specifications as a result of defects in the System or any System Component, including in materials, workmanship, or function, under terms of the Contract, Cubic shall pay liquidated damages of \$500.00 per day for time in excess of 72 hours that the System is not fully functional because the Data System (headquarters computer) or a subsystem thereof is out of service.

The warranty of any replacement product shall extend for the remaining period of the original warranty of the product that it replaces. This new product warranty excludes consumables and is specifically conditioned upon proper handling, usage, storage, and maintenance of the products by the City and/or any ultimate user.

C. Software Warranty Coverage

Cubic warrants that the software program shall substantially perform as required on the date of delivery for a period of two (2) years from the date of installation. Cubic's obligation under this warranty shall be to correct any repeated defects and to supply City with a corrected version within 72 hours after City has notified Cubic of such defects.

D. The only warranties made by Cubic are those expressly provided herein. THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE AND NO OTHER WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM THE COURSE OF DEALING OR USAGE OF TRADE, SHALL APPLY. THE REMEDIES SET FORTH IN THIS CONTRACT ARE THE SOLE AND EXCLUSIVE REMEDIES OF THE MTA FOR ANY CLAIMS, EXPENSES, OR DAMAGE ARISING OUT OF OR RELATED TO PRODUCTS AND SOFTWARE DELIVERED UNDER THIS CONTRACT. IN NO EVENT SHALL THE CUBIC BE LIABLE IN TORT OR IN CONTRACT FOR ANY INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES.

SP-9 DBE Participation Percentage

The Contractor shall ensure that all Disadvantaged Business Enterprise (DBE) requirements specified in the Contract have been met, and acknowledges through signing the Contract that the DBE participation goal committed to by the Contractor for the Contract is one percent (1.0%) of the Total Contract Value.

SP-10 Notices and Service Thereof

Replace LACMTA address with the following:

CONTRACTOR

Cubic Transportation Systems
5650 Kearny Mesa Road
San Diego, CA 92111

CITY

City of Torrance
Office of the City Clerk
3031 Torrance Boulevard
Torrance, CA 90503-5015

SP-11 Approved Subcontractors and Suppliers

The following list of Subcontractors greater than \$10,000 and all DBE Subcontractors and Suppliers will be used in the performance of this contract.

Subcontractor	Work Performed	License Type and Number	DBE
GFI Genfare 751 Pratt Blvd. Elk Grove, IL 60007 847-593-8855	Fareboxes and associated equipment and services		No
J-Tec Metal Products 1440 Louis Avenue Elk Grove Village, IL 60007 847-290-1800	Sheet metal fabrication and assembly	LACMTA	Yes
Priority Manufacturing, Inc. 300 eastern Ave. Bensenville, IL 60106	Sheet metal parts, i.e., brackets, housings	BART	Yes
KLI, Inc. 304 Roma Jean Parkway Streamwood, IL 60107 630-213-1282	Electronic Fabrication and assembly	LACMTA	Yes
Kormex Metal Craft 961 N. DuPage Lombard, IL 604148 630-953-8856	Sheet metal fabrication and assembly	LACMTA	Yes

SP- 13 Insurance

A. General.

Add paragraph to read as follows: "Contractor must provide certificates of insurance and/or endorsements indicating appropriate coverage, to the City Clerk of the City of Torrance before the commencement of work."

B. Minimum Coverage

Revise introductory paragraph to read as follows: "The insurance required hereunder shall be primary to, and not contributing with any other insurance maintained by the City of Torrance, shall name the City of Torrance, the City Council and each member thereof, members of boards and commissions, every officer, agent, official, employee and volunteer as an additional insured, and shall at a minimum, consist of: "

SP-14 Economic Price Adjustment

This provision is not applicable to this Affiliated Agency contract. Contract changes will be priced in accordance with General Condition GC-24.

SP-15 Contract Bonds

Change to read as follows: Payment Bond shall utilize Contractor's standard, reputable surety bond (AIG). The amount of the bond is to be: \$131,599.50 (ten (10) percent of the contract cost).

SP-17 Bus System Access:

City of Torrance
Transit Department
20500 Madrona Avenue
Torrance, CA 90503-3692

SP-21 Program Directors and Program Manager

A. Affiliated Agency Program Director and Program Manager:

1. City of Torrance Program Director and Program Manager:
Tom Whittle, Transit Director, or his designee.

B. Contractor's Program Director and Program Manager

2. Contractor's Program Manager for this Contract shall be the following person or his designee: Mark Kroncke.

SP-23 Options

This provision is not applicable to this Affiliated Agency Contract.

Add the following new Special Provisions:

SP-25 Regional Computer System

Performance of the Regional Systems proposed is contingent on the LACMTA Regional Central Data Collection System (CDCS) being in place and functional prior to installation of any Regional system.

SP-26 Regional Amortization of Shared Costs. Prices proposed for the Regional systems are predicated on amortizing non-recurring engineering (NRE) costs among the participating agencies. Unit prices for hardware and agency specific support are not subject to this amortization. In the event that not all of the planned eleven (11) participating Affiliated Agencies purchase the proposed Regional UFS Systems on or before the validity expiration date of the contractor's proposal, the remaining participating Agencies shall agree upon a share ratio to equal 100% of these costs.

Appendix A – Critical Path Schedule

Mandatory Milestones – Replace with following:

Table MX-1
Municipal Agency
Schedule of Milestones and Billings

Milestone No.	Description	Days After NTP*	Billing %
1	Mobilization: Agency acceptance of Program Schedule and Plan, Copy of Payment Bond and Certificate of Subcontract Commitment Payment by Cubic	30 **	5
2	Installation of Hardware and Software for Muni Headquarters Computer	90	25
3	Delivery, Installation and Testing of Bus Equipment	120	60
4	System Acceptance	150	10

*Notice to Proceed to be issued after LACMTA UFS installations are complete.

** Days after Municipal Agency Contract Award

Note: In accordance with Exhibit 1 – Payment, of Part D – Compensation and Payment Provisions of the UFS Contract, payments will be made within 30 days after receipt of properly prepared invoices and completion of the procured items as indicated herein.

**MODIFICATIONS TO
COMPENSATION AND PAYMENT PROVISIONS, PART D**

- CP-1 Basis of Compensation
Third paragraph: Add "are attached hereto as Attachment 1". Delete "(Price Sheets, Contract No. OP-02-4610-10)."
- CP-2 Progress Payments
Instead of progress payments, milestone payments are proposed for this contract. Therefore, this paragraph is not applicable to the Affiliated Agency contract.
- CP-3 Retention
This paragraph is not applicable to the Affiliated Agency contract.
- CP-4 Change Title to "Invoicing"
Change invoicing address to:
City of Torrance
Transit Department
20500 Madrona Avenue
Torrance, CA 90503-3692
- CP-5 Payment
Change remittance address to:
Cubic Transportation Systems, Inc.
P. O. Box 85587
San Diego, CA 92186-5587
- CP-7 Data Retention
This paragraph is not applicable to the municipal agency contract.

Exhibit 1 – Payment

Payment for Lump Sum Items

Delete and replace with: Payment will be made in accordance with the Milestone Payment Schedule, Table MX-1.

Determination of Progress

Not applicable since progress payments will not be made.

Payment for Equipment and Installation

Delete and replace with: Payment will be made in accordance with the Milestone Payment Schedule, Table MX-1.

Exhibit 2 – Advanced Cost Understanding

Not Applicable.

MODIFICATIONS TO TECHNICAL PROVISIONS, PART E

All technical requirements of the contract shall apply except as modified herein. Any customization of System Components beyond setting of configurable elements of the system designed for LACMTA shall be at extra cost to be negotiated between the Contractor and the Muni. Such customization must comply with the standards of the Universal Fare System and shall not prevent full interoperability of data systems, smart cards and other common elements. Such customization shall be subject to review and approval of LACMTA to ensure compliance with these standards.

For each Muni purchasing system components under this contract, only those portions of the technical specification applying to the system components being purchased by that Muni shall apply.

Specific sections of the Technical Specification shall be modified as follows:

Spec Para #	Title	Comments
1	GENERAL STATEMENT OF WORK	The scope of work consists of providing automatic fare collection equipment for buses as well as the associated garage equipment. The System includes design, manufacture, testing, delivery, installation, documentation and support of validating fareboxes and/or stand-beside contactless smart card validators, any necessary revenue collection equipment as well as the garage computer system. This System will interface with LACMTA through the Muni central computer (CDCS) and servers.

Spec Para #	Title	Comments
1.1	SYSTEM COMPONENTS AND WORK TO BE PROVIDED	Only the portions relevant to the equipment specified on the Agency's price lists will be included: bus fare collection system, contactless smart card system (bus fare collection only), sales office terminals, and division computer network. Transmittal of data to CDCS will be via communications infrastructure to be provided by the Muni Agency. Customization for each Agency will include configuration of data server (including report structure, fare tables, OpenView), GUI customization, business rule definition, installation evaluation, engineering support and system configuration. Otherwise, the configuration being provided to LACMTA will be provided to the Muni Agency, with no additional customization or interface development unless separately negotiated between Cubic and the Agency. In as much as any Agency system (such as an ATMS) matches that of LACMTA, the system will support it. The CDCS referred to in the contract will be the Muni CDCS, not the LACMTA CDCS, and will be obtained under a separate procurement. A warranty of 2 years is included; however, additional maintenance is not included, though can be purchased from Cubic at a later date. An inventory system such as a bar code scanner and software is not included.
1.2	QUANTITIES	Please refer to the price sheets.
1.3	DELIVERY SCHEDULE	Please refer to the milestone payment schedule.
1.4	LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY	Not relevant
1.4.1	Project Background	
1.4.2	LACMTA Operations and Alignment	Not relevant.
1.4.3	Fare Collection	For bus systems only. Based on agreed upon regional ticket types.
1.4.4	Zone and Distance Based Fares	a) ok b) Zone changes to be provided by the operator (or ATMS if identical to LAMCTA). c) not relevant d) ok
1.4.5	Off-Peak Provisions	There will be a non-peak table and 10 faresets
2	SYSTEM REQUIREMENTS	

Spec Para #	Title	Comments
2.1	WORK TO BE PERFORMED BY THE CONTRACTOR	See scope of work. An installation schedule will be provided. For any System Components previously provided to LACMTA, design submittals shall be those previously provided to and Accepted by LACMTA. For System Components not previously provided to LACTMTA, Contractor shall provide the Design Submittals for Preliminary Design Review as described in the relevant section of the Specification.
2.2	WORK TO BE PERFORMED BY AGENCY	
2.3	QUALITY OF WORK	
2.4	CODES AND STANDARDS	Cubic designs and builds in compliance with the Codes and Standards listed in this section. Demonstration of compliance through certification or similar means is not priced in this proposal as certification for all these Codes and Standards have not been required by other agencies.
2.5	DESIGN CRITERIA	
2.5.1	Physical Characteristics	
2.5.2	Human Factors	
2.5.2.1	Accessibility for Passengers with Disabilities	
2.5.2.1.1	Operation	
2.5.2.1.2	Instructions for Persons with Vision Impairments	
2.5.2.2	Lingual Capabilities	Not relevant
2.5.3	SRRPS Specification	Will use LACMTA design.
2.5.4	Transactional Data Base	Will use LACMTA design.
2.5.4.1	Card Data	Will use regional card format.
2.5.4.2	Bus Transactions	b) See section 1.1
2.5.4.3	Reports	
2.5.4.4	Design Acceptance	Will use LACMTA design.
2.5.5	Expandability	Bus only.
2.5.6	Electronic System Components	Cubic reuses existing technology on existing equipment designs where possible. While in some cases this practice may not be considered state-of-the-art, it does ensure reliable operation while meeting revenue service requirements. New designs or modifications will closely adhere to the requirement. Commercially available software versions will be identified at time of award.
2.5.7	Modular Design	
2.5.8	Power and Voltage Requirements	
2.5.8.1	Rail System Components	Relevant for FFSOTs only.
2.5.8.2	Bus System Components	There is approximately 0.6 amps draw for farebox in idle mode; farebox retains "full security" if power is lost, though some features, e.g., cashbox ID, may be lost.
2.5.8.3	Sales Office Terminals	Full function only.

Spec Para #	Title	Comments
2.6	MATERIALS AND WORKMANSHIP	
2.6.1	General Requirements	
2.6.2	Wiring	Terminal strips will be used where appropriate. Proven, existing equipment will not be redesigned. This includes the limited use of adhesive backed cable tie downs and supports.
2.6.3	Electrical Design	
2.6.3.1	Design Criteria	
2.6.3.2	Semiconductor Standards	All semiconductor components will be available from multiple sources where possible; use of sole source parts cannot be avoided in all cases if other RFP requirements are met (e.g., Pentium processor).
2.6.3.3	Printed Circuit (PC) Board Standards	
2.6.3.4	Microcomputer Standards	For LACMTA, and therefore for the Muni Agencies, Cubic will request written acceptance of an alternate for ZIF sockets. System components using the Intel Celeron processor based SBC (TVM and CLVM) utilizes a PGA 370 level actuated zero insertion force PGA socket. However, it is not standard practice for microprocessors to be installed with ZIF sockets where vibration may occur such as is the case with fare equipment as there is a risk that the microprocessor may come out. Therefore, we do not generally use ZIF sockets.
2.6.3.5	Electrical Devices and Hardware	
2.6.3.5.1	Fuses	
2.6.3.5.2	Relays	
2.6.3.5.3	Switches	
2.6.3.5.4	Circuit Breakers	
2.6.3.5.5	Plugs and Connectors	
2.6.3.6	Bus System Components	
2.7	ENVIRONMENTAL FACTORS	
2.7.1	Rail System Components Environment	Relevant for FFSOTs only.
2.7.1.1	Climate	Bus and FFSOT only; CDCS under separate contract.
2.7.1.2	Shock and Vibration	
2.7.2	Bus System Components Environment	Will conform to LACMTA standards and be accepted through LACMTA contract.
2.8	ELECTRICAL NOISE CONTROL REQUIREMENTS	
2.8.1	Electromagnetic Interference	Will conform to LACMTA standards and be accepted through LACMTA contract.
2.8.2	Grounding	Will conform to LACMTA standards and be accepted through LACMTA contract.
2.9	SOFTWARE REQUIREMENTS	Will conform to LACMTA standards and be accepted through LACMTA contract.

Spec Para #	Title	Comments
2.10	RELIABILITY, ACCURACY AND AVAILABILITY REQUIREMENTS	All items in this section will conform to LACMTA standards and be accepted through LACMTA contract.
2.10.1	Failures and Malfunctions Defined	
2.10.2	Reliability Requirements	
2.10.3	Accuracy	
2.10.4	Availability	
2.10.5	Failure Review Team	
2.10.6	Non-Chargeable Failure	
2.10.7	Chargeable Failure	
2.10.8	CSCP Accuracy, Reliability and Testing	
2.10.8.1	Accuracy	
2.10.8.2	Reliability	
2.10.8.3	CSCP Failures	
2.10.9	HSTE Reliability and Availability	Not relevant
2.11	MAINTAINABILITY PROGRAMS	Will conform to LACMTA standards and be accepted through LACMTA contract.
2.11.1	Maintainability Design Checklist	Will conform to LACMTA standards and be accepted through LACMTA contract.
2.11.2	Rail System Components Maintainability Requirements	Not relevant
2.11.3	Bus System Components Maintenance Requirement	Will conform to LACMTA standards and be accepted through LACMTA contract.
2.11.4	Preventive Maintenance	To be performed by Agency.
2.11.5	Revenue Servicing	Not relevant
2.12	DESIGN CRITERIA FOR NETWORKS	Based upon infrastructure to be provided by the Muni Agency.
2.13	STAND-ALONE OPERATION	
3	TICKET VENDING MACHINE	Not relevant
4	STAND-ALONE VALIDATOR (SAV)	Not relevant
5	CARD LOADING AND VALIDATING MACHINE (OPTION)	Not relevant
6	VALIDATING FAREBOXES	Will conform to LACMTA standards and be accepted through LACMTA contract. Any changes to specification will be submitted through change orders to LACMTA. ATMS interface is being developed for LACMTA specific system only.
6.1	FUNCTION	
6.2	OPERATIONS	
6.2.1	Farebox Operations - Coin/Tokens	The Muni farebox will accept U.S. coins and LACMTA tokens only.
6.2.1.1	Operation	
6.2.1.2	Coin Validator Acceptance Criteria	
6.2.1.3	Coin Override	The farebox coin validator has minimal moving parts and is designed to prevent coin jams. In the event of coin slot blockage or other coin validator failure, there are two manual bypass/anti-jam devices available.

Spec Para #	Title	Comments
6.2.1.4	Coin Validator Register	
6.2.2	Farebox Operations – Paper Currency	
6.2.2.1	Base Requirement	
6.2.2.2	Bill Validator Acceptance	
6.2.2.3	Bill Validator Acceptance Criteria	
6.2.2.4	Bill Validator Acceptance Override	
6.2.2.5	Bill Validator Register	
6.2.3	OPEN	
6.2.4	Farebox Operation - Illumination	
6.2.5	Farebox Operations - Fare Registration	
6.2.6	Farebox Operations - Driver's Digital Display	
6.2.7	Farebox Pushbutton Switches	
6.2.8	Driver Information Display	
6.2.9	Route/Run Segmenter	
6.2.10	Farebox Diagnostic and Operational Reporting	
6.2.10.1	On-Board Operational Testing and Measurements	PDAs will not be necessary to maintain equipment and therefore, not provided.
6.2.10.2	Indicators	
6.2.10.3	Power Supply Monitoring	
6.2.10.4	Automatic Sequence Testing	
6.2.10.5	Coin Mechanism Monitoring	
6.2.10.6	Coin/Bill Diagnostics	
6.2.10.7	Security Door/Cashbox Alarms	
6.2.10.8	Cashbox Early Warning Indicator	
6.2.10.9	Maintenance Performed	
6.2.10.10	Farebox Reporting	
6.2.11	Ticket/Token/Passes (TTPs)	
6.2.12	General Purpose Registers	
6.3	FAREBOX CONSTRUCTION	
6.3.1	Mechanical Details	
6.3.2	Electrical Details	
6.3.2.1	Main Logic Board	
6.3.2.2	Displays	
6.3.2.3	Harnesses, Connections and Wiring	
6.3.2.4	Miscellaneous	
6.4	ELECTRICAL INTERFACES	
6.4.1	Data Ports	
6.4.2	Probe Port	
6.4.2.1	Base Requirement	
6.4.2.2	Alternative Data Polling and Transmission (Option)	
6.4.3	Interface to LACMTA ATMS	
6.4.3.1	General	
6.4.3.2	J1708 Compatibility	
6.4.3.3	RS232 Interface	
6.4.3.4	Software and Reporting	

Spec Para #	Title	Comments
6.4.3.5	Driver Control Module	Not relevant.
6.5	OPEN	
6.6	CASHBOX	
6.7	ELECTRONIC LOCK - CASHBOX ACCESS DOOR	
6.7.1	Cashbox Access Door	
6.7.2	Operation	
6.7.3	Portable Electronic Key	Per price sheet.
6.7.4	Recoding Device	
6.7.5	Recharging Unit	
6.8	SECURITY	
6.8.1	General	
6.8.2	Locks and Keys	
6.8.3	Cashbox Interface	
6.8.4	Baffles	
6.8.5	Cashbox Identification	
6.9	WATERPROOF COVERS	
6.10	READ-ONLY MAGNETIC CARD PROCESSOR	Read-only card reader will be present but no software will be provided for it. Specific applications for this device may be negotiated between specific Muni Agency and Cubic, and will be at extra cost to be proposed to the Muni Agency by Cubic.
6.10.1	General	
6.10.2	Magnetic Cards	
6.10.2.1	Physical	
6.10.2.2	ASI Magnetic Stripe Cards	
6.10.2.3	OPEN	
6.10.2.4	LACMTA Transit Cards	Not relevant.
6.10.2.5	Driver ID Cards	Will be CSC ID instead.
6.10.2.6	Bank Credit Cards	
6.10.2.7	Schools and Sponsor Cards	Will be CSC card instead.
6.10.3	Function	
6.10.4	Magnetic Card Data	Not relevant.
6.10.5	OPEN	
6.11	DRIVER CONTROL MODULE	
6.11.1	General	See Section 1.1
6.11.2	Driver Interface Keys	
6.11.3	Display	
6.11.4	Illumination	
6.11.5	Construction	
6.11.6	Electronics	
6.11.7	Cable	
6.11.8	DCM Acceptance	
7	BUS TICKET PROCESSOR UNIT (TPU) (OPTION)	Option
7.1	GENERAL	
7.2	TPU TYPES	
7.3	MOUNTING	

Spec Para #	Title	Comments
7.4	WIRING AND CONNECTIONS	
7.5	TPU DOCUMENTS	
7.6	TPU DOCUMENT PROCESSING	
7.7	PASSENGER DISPLAY	
7.8	PRINTING	
7.9	DOCUMENTS TO BE PROCESSED	
7.9.1	Transfers	
7.9.1.1	Transfer Issue	
7.9.1.2	Transfer Validation	
7.9.2	NO SUBJECT	
7.9.3	OTHER FARE TYPES	
7.10	PROCESSING TIME	
7.11	PASSENGER INDICATIONS	
7.12	OTHER PERFORMANCE CHARACTERISTICS	
7.13	BAD-CARD NUMBER LIST	
7.14	DATA RECORDS, TRANSMISSION AND REPORTS	
7.15	DATA RECORDS, TRANSMISSION AND REPORTS	
7.16	OPERATING ENVIRONMENT	
7.17	CONSTRUCTION	
7.18	DATA REPORTING	
7.19	RELIABILITY AND MAINTAINABILITY	
7.20	MAGNETICALLY ENCODED CARDS AND DATA ENCODING	
7.21	OPEN	
8.3.1	Revenue Collection Vaults	
8.3.2	Cashbox Receiver	
8.3.3	Mobile Collection Bin	
8.3.3.1	Construction	
8.3.3.2	Quantities and Capacity	
8.3.3.3	Security	
8.3.3.4	Bin Identification System	
8.3.4	Vault Structure (RCV)	
8.3.5	Construction And Finishes	
8.3.6	Combined RCV/Bin Vault (Option)	
8.3.6.1	Cashbox Receiver	
8.3.6.2	Collection Bin	
8.3.6.3	Vault Structure (RCV)	
8.3.6.4	OPEN	
8.3.6.5	Protective Shelter Structure	
8.3.7	Installation	
8.3.8	Revenue Audit Units	
8.3.9	Security System	
8.4	OPEN	
8.5	FAREBOX REVENUE SERVICE THRESHOLD	

Spec Para #	Title	Comments
9	CONTACTLESS SMART CARD SUBSYSTEM	
9.1	CONTACTLESS SMART CARD PROCESSOR (CSCP)	As a clarification, the CSCP is not freestanding, but is a peripheral to the host device, which contains fare tables and processes transactions. The same smart card system is utilized in all devices supplied by Cubic.
9.2	CONTACTLESS SMART CARD PURCHASE AND LOADING	
9.3	SYSTEM ACCESS	
9.4	CSCP COMPONENTS	
9.4.1	Central Processing Unit (CPU)	
9.4.2	Antenna	
9.4.3	Display	Functionality will be provided on existing device displays rather than a separate CSC only display.
9.4.4	Audio Indicators	
9.4.5	Data Communications Interfaces	See response to 9.1
9.5	MODULARITY/UPGRADABILITY	
9.6	CARD INTERFACE	The CSCP can be programmed to process CSCs that are in accordance with ISO 14443 Types A, B, and Annex E (<i>GO CARD</i>) from all major Smart Card suppliers.
9.7	PROCESSING THROUGHPUT	
9.8	PHYSICAL REQUIREMENTS	
9.9	CSCP ACCEPTANCE TESTING	
9.10	MEDIA	Cards are being supplied under the UFS contract; no additional cards are proposed here. The card supplied for the UFS system will be the GO CARD, which is not ISO 14443 compliant. Additional, Muni-specific GO CARDS or other ISO 14443 compliant cards can be purchased at additional cost.
9.10.1	Physical Standards	Limited use CSCs may be thinner than specified by these ISO Standards. Limited use CSCs have not been fully implemented at this time.
9.10.2	General Requirements	
9.10.2.1	Card Operating System	The proposed CSCs have inbuilt state machine logic to provide the COS features. The Transit System Application is locked and unlocked based on Transit Application Data Objects securely written to the CSC.
9.10.2.2	Card Memory Storage Capacity	
9.10.2.3	Card Reliability	
9.10.2.4	Useful Card Life	
9.10.2.5	Privacy	

Spec Para #	Title	Comments
9.10.2.6	Card Delivery and Initialization	The Manufacturer's card serial number is guaranteed unique and is a critical element in CSC security. It, therefore, cannot be in accordance with sequences desired by LACMTA or the Muni Agency. However, if required, a separate MTA and/or Agency serial number can be encoded in the CSC's memory that is in accordance with sequences desired.
9.10.3	Graphic Requirements	As per agreed-upon regional design. Cubic complies to this section, but assumes ISO 7811-3 is only applicable to Bank issued cards of the future.
9.11	CARD DOCUMENTS TO BE PROCESSED	
9.11.1	Card Documents	
9.11.2	Transfers	
9.11.2.1	Transfer Issue	
9.11.2.2	Transfer Validation	
9.11.3	Passes	
9.11.4	Stored Ride/ Value Tickets	
9.11.5	Permits	
9.11.6	Sponsor Cards	
9.11.7	Driver and System Program Cards	
9.11.8	Fair Fares	System will support Fair Fares in a similar manner as that implemented by LACMTA, but this feature will not be available until the Muni CDCS is implemented.
9.11.9	Autoload	System will support Autoload, but this feature will not be available until the Muni CDCS is implemented.
9.11.10	Access Cards	No access cards to be provided under this contract. They are to be available for specific purpose (maintainer identification to the farebox) if desired by the Muni at a cost to be negotiated between Muni and Cubic.
9.12	BAD-CARD NUMBER MANAGEMENT	
9.13	FRAUD PREVENTION	For CSCs, the manufacturers unique CSC serial number is used in fraud prevention techniques.
9.13.1	Identification of Duplicate Cards	See response to 9.13.
9.13.2	Encryption	As per LACMTA for cards procured through LACMTA UFS contract.
9.13.3	Intellectual Property	Please see response to 2.9
9.13.4	Submittals	As per LACMTA for cards procured through LACMTA UFS contract.
9.14	TRANSACTION RELIABILITY	As per LACMTA design.
9.15	SMART CARD SUPPLY AND PERSONALIZATION	As per LACMTA design.
10	HIGH SPEED CSC ENCODER (OPTION)	Option not part of current proposal.

Spec Para #	Title	Comments
11	SALES OFFICE TERMINALS	Only Full function SOTs are provided (per price sheet) under this proposal. These FFSOTs will interface with Muni CDCS (separate proposal to LACMTA).
11.1	FUNCTIONAL REQUIREMENTS	
11.2	DESIGN	
11.2.1	Customer Interface Unit	CSCP is compatible with Section 9.1, however uses host intelligence for fare table processing.
11.2.2	OPEN	
11.2.3	Full Function Sales Office Terminal	
11.2.4	Contactless Smart Card Processor (CSCP)	Please see response to Section 11.2.1
11.2.5	Receipt Printer	
11.3	DATA COMMUNICATIONS AND STORAGE	
11.4	DESIGN REVIEW	See Section 2.1
12	OPEN	
13	FINANCIAL CLEARING	Not relevant to current proposal. Will be addressed in Muni CDCS system.
14	DATA COLLECTION AND REPORTING SYSTEMS (DCRS)	Only the sections pertaining to the division computer system are relevant here. The others will be addressed in Muni CDCS system.
14.1	FUNCTIONS/SUBSYSTEMS	
14.1.1	Workstation Operating Function Requirements	Any PC with Windows 2000 or later OS can be used to access Muni CDCS. Therefore, no additional workstations are provided beyond garage computer.
14.1.2	Systems Files Modifications	Will be performed locally via access to Muni CDCS.
14.1.3	Fare Table Design	Will be performed locally via access to Muni CDCS.
14.1.4	Card Design Management	Muni CDCS.
14.1.5	Bad-Card Maintenance	Muni CDCS.
14.1.6	Smart Card Configuration	Muni CDCS.
14.1.7	Payment Processing	Muni CDCS.
14.1.8	Schools and Sponsor Card reporting	Muni CDCS.
14.1.9	Log-On Table Maintenance	Will be performed locally via access to Muni CDCS.
14.2	CENTRAL COMPUTER HARDWARE AND SOFTWARE	Applicable to Muni CDCS only.
14.3	DIVISION DATA COLLECTION AND REPORTING SYSTEM	Muni garage computer is analogous to LACMTA Division data collection and reporting system. Transaction data will be stored on the Muni Server at the CDCS and reports will generated via the CDCS. Access to these servers will be available from the computers at the Agency. Maintenance reports can be obtained from the garage computer.
14.3.1	Data Probe	
14.3.2	RF LAN Data Transmission	Cubic will implement a dedicated UFS LAN.
14.3.3	Portable Data Probe System	Will be provided if included in price sheet.

Spec Para #	Title	Comments
14.3.4	Division Computer System	
14.3.4.1	Computers	
14.3.4.2	Uninterruptible Power Supply	
14.3.5	System Operation	
14.3.5.1	Farebox Probing Operation	
14.3.5.2	Wireless LAN Operation	
14.3.5.3	Computer Operation	
14.3.6	Division Computer System Reporting	
14.4	DATA TRANSMISSION	Transmission will be to Muni CDCS
14.4.1	Hardware	Not currently quoted – assume Agency will provide.
14.4.2	Software	
14.5	MONITORING FUNCTIONS	Those functions that are provided for LACMTA for the equipment purchased by the Muni Agency will be available.
14.6	DATA ANALYSIS AND REPORT GENERATION	Will be incorporated through Muni CDCS. Similar to LACMTA CDCS but will be customized for each agency.
14.6.1	Report Formats	
14.6.1.1	Individual Unit Reports	
14.6.1.2	Periodic Summary Reports	
14.6.1.3	Cashbox and Money Container Report	
14.6.1.4	Bin Report	
14.6.1.5	Exception Reports	
14.6.1.6	Security Reports	
14.6.1.7	Farebox Bypass Report	
14.6.1.8	Computer Access Log	
14.6.1.9	Field System Component Status	
14.6.1.10	Field Replaceable Unit Failure Report	
14.6.1.11	Field Maintenance Report	
14.6.1.12	Card Utilization Reports	
14.6.1.13	Card Settlement Report	
14.6.1.14	Mirroring Card Activity	
14.6.1.15	Passenger Specific Data	
14.6.1.16	Additional Reports	
14.6.2	Additional Reporting Requirements	
14.6.2.1	Transactional Data	
14.6.2.2	Ridership Calculation	
14.6.2.3	Report Generation	
14.6.2.4	Editing Data	
14.6.2.5	Interface to SCADA	Not relevant
14.6.2.6	Data Retention	
14.6.3	Sample Reports	
14.7	SECURITY AND RECOVERY	Muni CDCS will be analogous to LACMTA CDCS.
14.7.1	Data Protection and Recovery	
14.7.2	Security	
15	MAINTENANCE	Not part of current proposal. Can be discussed with each agency separately at a later date.
16	OPEN	

Spec Para #	Title	Comments
17	INSTALLATION	Bus installation will be evaluated for each agency on an individual basis.
18	QUALITY ASSURANCE, INSPECTION AND TESTING	
18.1	QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)	<p>Contractor shall exercise the same level of Quality Assurance and Quality Control as for the LACMTA UFS contract in Section 18.1. Muni shall accept Contractor's QA program as submitted to LACMTA. No further QA submittals shall be required, though Muni may obtain copies of QA documents from Contractor if desired. Muni shall have the following rights:</p> <ul style="list-style-type: none"> • Conduct on-site inspection at Contractor's manufacturing facilities if desired, in accordance with General Condition GC-13B of the UFS Contract. • Obtain from the Contractor copies of the QA/QC program documents as submitted to and accepted by LACMTA. • Inspect and confirm Contractor's quality inspection records for materials and products delivered to the Muni. Such inspection shall require 60 days notice to the Contractor and shall be performed at the Contractor's facility. <p>Failure of the Muni to conduct such a review or obtain such documents shall not release the Contractor from conducting the QA/QC program as called for in the MTA contract.</p>
18.2	INSPECTION AND TESTING PLANS, FACILITIES AND REPORTS	<p>Inspection and testing plans, facilities and report shall be conducted for Muni System Components to the same standards and according to the same test plan as for LACMTA. No further submittals, beyond those previously submitted to and Accepted by LACMTA shall be required except as follows:</p> <ul style="list-style-type: none"> • Contractor shall, on request of the Muni, provide to the Muni copies of the test plans submitted to and Accepted by LACMTA. • Contractor shall provide a schedule to the Muni for the testing of System Components to be delivered to that Muni. <p>Inspection and test reports complying with the requirements of 18.2.3. and 18.2.4. shall be made available for inspection on 30 days notice.</p>

Spec Para #	Title	Comments
18.3	SYSTEM INSPECTION AND TESTING	<p>For any System Components that have previously been delivered to LACMTA, the following testing is not required:</p> <ul style="list-style-type: none"> • 18.3.1 Design Qualification Testing • 18.3.2 Contractor Facility Testing and Inspection • 18.3.3 First Article Configuration Inspection (FACI) • 18.3.4 First Article Testing (FAT) <p>For System Components that have not previously been delivered to LACMTA, the Contractor may receive a waiver of certain testing. Such waiver may be granted by LACMTA based on Contractor submitting to LACMTA documentation as required under 18.3.1.1. (Design Qualification through Analysis), 18.3.1.2. (Waiver for Proven System Components), and/or 18.3.4.3.b) (environmental test waiver). Muni shall accept waivers granted by LACMTA under such procedures.</p>
18.4	NETWORK INTEGRATION INSPECTION AND TESTING	<p>A network integration test shall be required to demonstrate that Division Computers and the Muni CDCS operate as a functional system. This shall be conducted in accordance with the requirements of Article 18.4, excepting System Components not in the Muni Contract(s), such as TVMs, SAVs and CLVMs; and subparagraph g). This single Muni network integration test shall be conducted by the Contractor for all Muni systems, under LACMTA supervision. Successful completion of the Muni network integration test shall be accepted by the Muni as proof of the suitability of the network for its purposes.</p>

Spec Para #	Title	Comments
18.5	INSTALLATION AND ACCEPTANCE INSPECTION AND TESTING	<p>Contractor shall conduct installation and acceptance testing in accordance with the requirements of 18.5, except as follows:</p> <ul style="list-style-type: none"> • Procedures shall be identical for all Munis, unless Muni's elect to purchase items not currently in the LACMTA contract, and shall comply with the procedures that have previously been submitted to and accepted by LACMTA. • A single Test Review Board, as described in 18.5.2., shall be established to review testing for all Munis on an as needed basis. Purpose of this Test Review Board shall be to resolve any disputes about performance of Muni System Components. • No PIAT, as described in paragraph 18.5.5.2, shall be conducted, as this duplicates work previously performed at LACMTA. • Acceptance testing for Muni System Components shall be as described in 18.5.5. (Bus System Components Testing) and shall consist of a 14 day break-in period followed by a 28-day Reliability, Maintainability and Accuracy Test (RMAT) as described in 18.5.5.3. • Paragraphs 18.5.4 a and b are not applicable. • Paragraph 18.5.4.1 – References to TVM, SOT, CLVM or SAV are not applicable. • Paragraph 18.5.4.2 – References to TVM, SOT, CLVM or SAV are not applicable. • Paragraph 18.5.5.1 – References to TVM, SOT, CLVM or SAV are not applicable.
18.6	HSCE TESTING REQUIREMENTS	HSCE option not exercised.
18.7	SYSTEM AND SYSTEM COMPONENT ACCEPTABILITY	
19	PRODUCT SUPPORT	
19.1	TECHNICAL SUPPORT	<p>Technical support shall be provided on-site or by phone through the end of the warranty period on all System Components delivered under the Contract. Telephone technical Support shall be available from 7am through 6pm, seven days per week. On-site technical support shall be available during standard business hours on weekdays to resolve issues that have not been resolved via phone support, through the end of the warranty period, on 48 hours notice. Thereafter, technical support shall be available at an hourly cost to be negotiated with the Municipal Agencies for the type(s) of support requested.</p>

Spec Para #	Title	Comments
19.2	MANUALS	<p>Manuals shall be provided to the Muni that are the same as those provided to LACMTA, with modifications needed to cover System Components other than those delivered to LACMTA. Quantities of manuals delivered to each agency shall include the minimum:</p> <ul style="list-style-type: none"> • Operation instruction manual for all System Component types except as listed below 3 copies • Bus System Components operation manuals 3 copies • Bus operators brochures 25 copies • Repair and maintenance manual 3 copies • Shop maintenance manual 3 copies • Illustrated parts catalog 3 copies • Diagnostic Test Equipment manuals 3 copies • Special tools manuals 3 copies • Maintenance manuals for microprocessor based products 3 copies • Integrated wiring diagrams 3 copies • Software user manuals 3 copies. <p>All manuals shall be provided in hard copy and computer format (PDF or comparable) allowing the Muni to print additional manuals in-house. Contractor shall make additional hard copies available at prices to be negotiated with the Muni. Manuals shall comply with the standards in 19.2.</p> <p>For System Components that are identical to those previously provided to LACMTA, LACMTA's Acceptance of the manual shall be Accepted by the Muni. For System Components that differ from those previously provided to LACMTA, Contractor</p>

Spec Para #	Title	Comments
19.3	OPEN	

Spec Para #	Title	Comments
19.4	TRAINING	<p>The Contractor shall provide training to Muni personnel that shall comply with the requirements of 19.4., except as follows:</p> <ul style="list-style-type: none"> • Paragraph 19.4 c, d, g; 19.4.2 a, Training for the Muni's will be a train-the-trainer program. One class for all Muni's will be given. • Paragraph 19.4 g -- Computer based training is not required. However, to the extent that computer based training developed under the base LACMTA contract covers System Components delivered to the Muni, Contractor will provide a single copy of that program. • Paragraph 19.4.2.2 -- Training Delivery Schedule: Contractor shall develop and deliver to the Muni a schedule for training to be conducted for Muni personnel. • Paragraph 19.4.3.5 c) – Contractor shall provide training for the following personnel, per Muni, using the same program previously developed for LACMTA, <ul style="list-style-type: none"> • • Bus Operator Trainers ("train the trainers") 4 employees • Operations Supervisors 4 employees • Maintenance Supervisors 4 employees • Fare Collection Electronic Technicians 4 employees • Revenue Processors 2 employees • Information Technology Systems 4 employees • Additional employees may be trained at additional cost to be negotiated between the Contractor and the Muni. • Microprocessor Hardware/Software Repair and Reprogramming Training shall not be provided to individual Munis. • The Contractor shall provide two instructor guides for each training course.

Spec Para #	Title	Comments
19.4 (cont)		<ul style="list-style-type: none"> • Written Training Aids as described in 194.5.2. and Student Workbooks as described in 19.4.5.3 shall be available electronically for printing and reproduction by the Muni. • Paragraph 19.4.3 a) Training will be scheduled with each agency to take place prior to installation. • Paragraph 19.4.3.1 a) – References to TVMs, CLVMs and SAVs are not applicable. • Paragraph 19.4.3.2 c) – Not applicable for the Train The Trainer Program. • Paragraph 19.4.3.4 – Not applicable. • 19.4.3.5 c) and d) -- Not applicable for the Train The Trainer Program • 19.4.3.6 a) -- Not applicable for the Train The Trainer Program • 19.4.3.8 -- Not applicable for the Train The Trainer Program • 19.4.3.9 – Training at this level is not included in this proposal. • 19.4.6 -- Not applicable for the Train The Trainer Program
19.5	DIAGNOSTIC AND TEST EQUIPMENT	Not applicable.
19.6	MAINTENANCE TOOLS	Not applicable.
19.7	MAINTENANCE REPORTING SYSTEM	No computer-based maintenance reporting system is required under this Contract. However, Contractor shall make available to the Muni the Maintenance Reporting System provided for MTA at a price to be negotiated with the Muni.
19.8	SPARE PARTS	Revise as follows: Contractor shall provide spare parts to the Muni constituting 15% of total hardware value, except that for those Muni's having existing Odyssey fareboxes, the spare parts shall be 6% of total hardware value. Specific parts to be provided shall be established in discussion between Contractor and the Muni.
19.9	INVENTORY SYSTEM	No bar code scanners or inventory system shall be provided under this Contract. However, all major subassembly modules shall have a unique serial number and bar code in-scribed or permanently applied per the requirement of 19.9, allowing the Muni to establish an inventory system and/or obtain bar code scanners to conduct such inventory system.
19.10	WARRANTY	Contractor shall warrant the System Components provided for two years from acceptance of System Components In accordance with Cubic standard product and software warranties.

Spec Para #	Title	Comments
19.11	MAINTENANCE OF SOFTWARE	Maintenance of software is limited to Software warranty, see Section SP-7 (Special Provisions)
19.12	INITIAL TICKET SUPPLY	Not relevant.
20	MANAGEMENT	
20.1	CONTRACT MANAGEMENT	<p>Contract Management shall comply with the requirements of 20.1 of the LACMTA contract, with the following exceptions:</p> <ul style="list-style-type: none"> • Contractor may appoint a different Program Director if needed. However, the Program Director for Muni contracts shall report to the Program Director for the LACMTA contract. • Muni shall accept the Management Plan as previously submitted to and Accepted by LACMTA • Within 30 days after execution of the final Muni Contract, Contractor shall develop and submit to each Muni a proposed schedule for production, installation and testing of the System Components to be delivered to the Muni. Muni shall Accept or negotiate modifications to such schedule within 60 days thereafter. Schedule for individual Munis shall be incorporated into the Contractor's Master CPM Schedule and shall be updated and submitted to LACMTA in accordance with the requirements of the LACMTA Contract. LACMTA and Contractor may modify this schedule as system design and testing at LACMTA proceeds and shows viability of System Components.

Spec Para #	Title	Comments
20.2	PROJECT MEETINGS.	<p>There will be the following project meetings:</p> <ul style="list-style-type: none"> • Progress Meetings shall be conducted Quarterly with all Munis (single meeting for all participating Munis and LACMTA) after NTP. • Design Review: <ul style="list-style-type: none"> — For any installation, construction or alteration of physical facilities, including buses, at the Muni, Contractor shall meet with the Muni at least 90 days prior to such proposed construction or alteration and provide full documentation on the proposed installation, construction or alteration for Acceptance by the Muni. • Installation Meeting(s) to occur at 30 to 60 days prior to installation of System Components at any site (scheduled lead-time may be changed by mutual agreement). • Construction Photographs: Contractor shall document any construction or modification of facilities as required at 20.8.1.6. • For any System Components previously provided to LACMTA, design submittals shall be those previously provided to and Accepted by LACMTA. For System Components not previously provided to LACTMTA, Contractor shall provide the Design Submittals for Preliminary Design Review as described in the relevant section of the Specification. <p>Any submittals under this Contract shall comply with the requirements of 20.8.</p>
20.3	POST AWARD CONFERENCE	See 20.2 for description of project meetings; this meeting has been eliminated.
20.4	CONSTRUCTION SAFETY AND QUALITY ASSURANCE MEETING	See 20.2 for description of project meetings; this meeting has been eliminated.
20.5	PROGRESS MEETINGS.	See 20.2 for description of project meetings; these meetings have been eliminated.
20.6	INSTALLATION MEETINGS	This section has been replaced by Section 20.2
20.7	DESIGN AND CONFIGURATION CONTROL	See 20.2 for description of project meetings; these meetings have been eliminated.
20.8	SUBMITTALS	Applicable for relevant submittals only.
21	ARCHAEOLOGICAL AND PALEONTOLOGICAL COORDINATION	Not relevant
22	BUS SMART CARD PROCESSOR UNIT (BSU)	A DCU is not included; buttons will be included on the BSU instead. Please refer to 2.10.2 response for reliability requirements.
22.1	BUS EQUIPMENT	
22.2	DIVISION COMPUTER	
22.3	RELIABILITY AND AVAILABILITY	Please refer to 2.10.2 response for reliability requirements.

Spec Para #	Title	Comments
22.4	INSTALLATION	
22.5	SYSTEM SUPPORT	
22.6	DESIGN PROCESS	
23	HANDHELD CARD VALIDATOR (HHV)	

Additional Modifications to the Technical Specification:

14.3.4.1 Computers

- a) Revise to read as follows:
All microcomputers will be fully compatible with the delivered LACMTA UFS System.
- c) Revise to read as follows:
All microcomputers will be fully compatible with the delivered LACMTA UFS System, such as the attached proposed configuration for the UFS Garage Computer.

*EXHIBIT A***SOFTWARE LICENSE AGREEMENT BETWEEN CUBIC AND CITY OF TORRANCE**

This Agreement is entered into as of the Eighteenth day of March, 2003 ("Effective Date"), by and between Cubic Transportation Systems ("Licensor"), having its office at 5650 Kearny Mesa Road, San Diego, California, and the City of Torrance ("Licensee"), having its offices at 3031 Torrance Boulevard, Torrance, CA in which the parties agree as follows:

1. Scope

- a) Licensee has acquired or will acquire from Licensor manufactured equipment comprising Licensee's Universal Fare System ("System"). The System will contain Software ("Licensed Software") that is acquired pursuant to a contract (the "UFS Contract") with Licensor of even date herewith. The UFS Contract is incorporated herein by reference as though fully set forth herein, and the terms used herein shall have the same definitions as the terms defined therein. This Agreement is incorporated as Exhibit GC-1 to the UFS Contract.
- b) The Licensed Software consists of: (1) embedded, pre-loaded, and other Software of Licensor, including but not limited to Software in ROM's, PROM's, and EPROM's, and other Software owned by Licensor provided on media such as floppy disk, tape, diskette, and CD-ROM as described in the UFS Contract, and (2) Custom Programming specifically developed for Licensee by Licensor under the UFS Contract.
- c) The Licensed Software licensed hereunder consists of the Software owned by Licensor and described in the UFS Contract and third party software ("Third Party Software") that Licensor does not own but is licensed to distribute. The terms of this Agreement apply to the Licensor owned Software and any Third Party Software to the extent that it is not inconsistent with any license agreement to the Third Party Software, in which case the terms of such license apply to the Third Party Software.

2. License of Rights

- a) Upon and subject to the terms of this Agreement, Licensee is granted a perpetual, non-exclusive, irrevocable and royalty free license to use the Licensed Software in conjunction with its use and operation of the UFS System. The License shall be effective on the date first above written, except for Custom Programming, which shall be effective upon Final Acceptance by Licensee of the UFS System under the UFS Contract.
- b) Upon and subject to the terms of this Agreement, Licensee is granted a perpetual, non-exclusive, irrevocable and royalty free license to use the Documentation in connection with use of the Licensed Software in accordance with the terms of this Agreement and the UFS Contract.
- c) Licensee shall use the Licensed Software as described in the UFS Contract.

Software License Agreement

- d) As used in this License, "irrevocable" includes, but is not limited to, the right of Licensees to continue using the Licensed Software irrespective of any breach or default pursuant to the terms hereof. Licensor's remedy for such a breach or default shall be limited to damages.

3. Ownership and Confidentiality of Licensor Software and Documentation

- a) Licensee acknowledges that the Licensed Software and Documentation furnished under the UFS Contract, including, but not limited to, all ideas and procedures, processes, systems, methods of operation, concepts, principles, discoveries, inventions and worldwide patent and copyright rights remain the sole and exclusive property of Licensor or its third party supplier, and acknowledges Licensor's exclusive rights to the application, manufacture, development, use, display, reproduction, modification, and the transfer of the Licensed Software and Documentation and to all worldwide patent and copyright rights to and in the Licensed Software and Documentation.
- b) Licensee acknowledges and agrees that the Licensed Software and the Documentation are confidential, proprietary material of Licensor. Except as expressly permitted by this Agreement or the UFS Contract, Licensee shall not copy, use, distribute, install, sell, transfer, publish, disclose, or display the Licensed Software or the Documentation, or otherwise make the Licensed Software or Documentation available to any person or entity, other than to its listed Affiliated Agencies.
- c) Nothing herein shall be construed as granting Licensee any ownership of or rights in the Licensed Software or the Documentation, which shall at all times remain the sole property of Licensor.
- d) Except for modifications to the Custom Programming, Licensee may not modify, adapt, reverse engineer, merge with other software, prepare derivative works of, disassemble, or decompile the Licensed Software, except that Licensee may make copies of Licensed Software for backup purposes. Licensee must reproduce all Licensor copyright, proprietary and trademark notices on the copy.
- e) Licensee shall limit access to the Licensed Software and the Documentation to its authorized employees and authorized employees of Affiliated Agencies and other entities as provided in the UFS Contract. Licensee shall advise such employees of the terms of the Agreement and shall take all necessary steps to ensure compliance with this Agreement by such employees.
- f) Licensor may, at its option, upon reasonable notice to Licensee, periodically inspect the location at which the Licensed Software and the Documentation, and any copies thereof, are used or located to assess Licensee's compliance with these provisions and restrictions. Licensor's lack of exercise of this option shall not be deemed a waiver of Licensor's rights or acceptance or approval of Licensee's compliance.

4. Confidentiality and Use of Custom Programming

Licensor acknowledges that Licensee's use of the Custom Programming, including, but not limited to, all computer programs, interfaces, and modules to be specifically developed by Licensor, including, as to each program, interface, and module; the processes and routines used in the processing of data, tapes, disks, software documentation, corrections, updates, enhancements, releases, and versions to such programs, interfaces, and modules, and all copyrights, trade secrets, inventions (whether or not patentable), proprietary rights and any Intellectual Property Rights contained therein, are not subject to the restrictions on use of the Licensed Software, and acknowledges Licensee's rights to further develop, adapt and modify the Custom Programming,

5. Warranty and Limitation of Liability

- a) Licensor hereby incorporates the Software Warranties contained in the UFS Contract and warrants the Licensed Software as provided therein.
- b) Licensor further represents and warrants that: 1) it has full power and authority to grant the rights granted by this Agreement and the UFS Contract to Licensee, 2) no consent of any other person or entity is required by Licensor to grant such rights other than consents that have been obtained and are in effect, 3) neither the performance of this Agreement by Licensor, nor the license to, and use by, Licensee, its Affiliated Agencies, and their users of the Licensed Software will in any way violate any non-disclosure agreement, nor constitute an infringement or other violation of any copyright, trade secret, trademark, service mark or patent of any third party, and 4) as of the Effective Date, there are no actual or threatened suits by such third parties based on any alleged violation of such rights by the Licensor.
- c) Licensee shall be entitled to use the Licensed Software without disturbance. Licensor represents and warrants that this Agreement is neither subject nor subordinate to any right or claim of any third party, including without limitation Licensor's creditors.
- d) Contractor further represents and warrants that it has obtained for the MTA all licenses from third parties in perpetuity as necessary to use standard commercially available Software packages embedded in or integrated with the Software, without additional fee or cost to MTA. Except as otherwise specifically restricted in the applicable third-party license agreement, all terms of this Contract shall apply to the embedded Software package. The Contractor shall provide complete, commercially available Documentation for any embedded Software packages.

4. Modification

Licensor has the exclusive right to modify the Licensed Software. Licensor shall not be responsible for any modification of the Licensed Software made by Licensee.

5. Termination

The Parties' rights to terminate this Agreement shall be on the same grounds as set forth in the UFS Contract. Within thirty days after termination of Licensee's right to use any Licensed Software, Licensee must certify in writing to Licensor that all copies of such Software have been returned to Licensor or destroyed.

6. Jurisdiction

It is the intent of the parties hereto that this Agreement shall be construed, interpreted, and applied in accordance with the Laws of the State of California, and the courts of such state shall have exclusive jurisdiction and shall be the exclusive venue of any lawsuit instituted by any party.

7. Entire Agreement

This Agreement, along with the applicable parts of the UFS Contract, state the entire agreement between the parties with respect to the subject matter hereof, and supersede any and all other prior and contemporaneous understandings, representations, and agreements, oral or written. No alteration, modification, release, or waiver of this Agreement or any of the provisions hereof shall be effective unless in writing, executed by the parties hereto. Amendments and Changes to the UFS Contract applicable to the subject matter of this Agreement shall constitute Amendments and Changes to this Agreement.

8. Assignment

The Parties' rights with respect to Assignment of this Agreement shall be as set forth in the UFS Contract.

9. Patent Indemnity

Licensor shall provide to Licensee the Patent Indemnity set forth in the UFS Contract.

10. Export

Licensee represents and warrants that neither the Licensed Software nor the Documentation shall be disclosed to any foreign national, firm, or country, nor shall be exported from the United States without first complying with all the requirements of the International Traffic in Arms Regulations and the Export Administration Act, including the requirement for obtaining an export license, if applicable.

Software License Agreement

11. Severability

If any provision of this Agreement is held invalid under any applicable statute or rule of law, it is to that extent to be deemed omitted and the remainder of the Agreement shall remain in full force and effect.

12. Headings

The headings of the several Articles herein are inserted for convenience of reference only and are not intended by the parties to be a part of, or to affect, the meaning or interpretation of this Agreement.

IN WITNESS WHEREOF, the parties hereto have been duly authorized to set their hands as of the date first above written.

CUBIC TRANSPORTATION SYSTEMS, INC.

S. E. Purcell
S. E. Purcell
Vice President, Contracts

3/24/2003
Date

Tax ID No.: 95-2773786

CITY OF TORRANCE

Dan Walker
Dan Walker
Mayor

ATTEST:
Sue Herbers
Sue Herbers
City Clerk

APPROVED AS TO FORM:

JOHN L. FELLOWS III
City Attorney

By: John L. Fellows III

Date

Exhibit B

City of Torrance Price Sheet

Line Item	Description	Contract Price Line Item	Per Unit Price	Qty	Total Price
1	Implementation Costs				
1a	Program Management:				\$11,725
1b	Contracts:				\$75,075
1c	Non-Recurring Engineering				
	Evaluate farebox, DCU location		\$110	67	\$7,370
	Evaluation Validator location				\$3,000
	System configuration (one database per Muni)				\$13,836
	Engineering support		\$46	67	\$3,082
	RF LAN and garage site evaluation (per garage)		\$5,000		\$5,000
	Warranty, 2-year				\$39,950
1d	Documentation		\$504	67	\$33,764
1e	Training		\$20,260	1	\$20,260
1f	Installation				
	Bus installation farebox & antenna	1.41	\$132	67	\$8,844
	Bus Standalone Validator installation		\$132	6	\$792
	Installation of HQ computer	1.42, 1.43	\$9,144	2	\$18,288
	Site Preparation for Bus Divisions	1.37	\$7,331	2	\$14,662
	Pre- installation Test	1.44	\$89	67	\$5,963
	Acceptance Test		\$89	67	\$5,963
2	Electronic Validating Farebox	1.13	\$7,377	67	\$494,259
3	Personal Data Assistant for Farebox Maintenance Activity	1.15	\$1,197		
4	Farebox Waterproof Covers	1.19	\$116	67	\$7,772
5a	Revenue Collection Vault (RCV) including One Receiver Each	1.20	\$30,633	3	\$91,899
5b	Receiver Only (No vault)		\$15,246		
6	Portable Electronic Key (including battery charging unit)	1.21	\$844	1	\$844
7	Mobile Collection Bins	1.22	\$7,275	2	\$14,550
8	Revenue Audit Unit	1.23	\$7,664	1	\$7,664
9	Division Computer System (S/W)	1.29	\$26,660	2	\$26,660
10	Farebox Data Probe	1.30	\$7,492	2	\$14,984
11	Portable Data Probe System	1.65	\$18,069		
12	New Ranier Board and Tri-Reader (Odyssey Farebox Upgrade)		\$2,839		
13	GFI Ranier Board Pre UFS For Odyssey Farebox		\$2,456		
14	Driver Control Unit (Basic)	4.44	\$1,260		
15a	PR01-1059-2 BUS Validator (BSU) No DCU		\$3,500	6	\$21,000
15b	BSU NRE		\$271	6	\$1,626
16	Kit, Installation, Driver Control Unit (Basic)		\$558		
17	Communications Equipment (DCS-CDCS) comm equip		\$2,550	2	\$2,550
18	Data Collection Device (Hand Held Computers)	1.66	\$4,058		
19	Data Collection Device (Software License Fees)		\$1,950		
20	Division Computer System (DCS) Hardware (PC + RF Access Point) (garage)		\$17,927	2	\$17,927
21	Muni HeadQuarter Computer Muni Work Stations S/W Customization				
	Installation		\$6,929	1	\$6,929
	Customization of App Server for each Muni including:				
	-Customize Open View		\$6,929	1	\$6,929
	-Customize Fare Tables		\$6,929	1	\$6,929
	Test		\$43,508	1	\$48,508
	GUI Customization		\$13,858	1	\$13,858
	Business Rules Definition		\$48,508	1	\$48,508
	Load Database with Agency's Routes, Runs, Stops		\$6,929	1	\$6,929
	Load Database with Agency's Fleet Information:		\$3,842	1	\$3,842
	Load Agency's Database with personnel infrastructure, security infrastructure, and employee CSC Database.		\$13,858	1	\$13,858
22	Muni HeadQuarter Computer (Server) at CDCS		\$15,000	1	\$15,000
23	Muni Central (without Redundant Server)		\$5,465,725		
24	Full Function Sales Office Terminals	1.26	\$9,610		
25	Spare Parts			15%	\$95,493
26	Magnetic TPU H/W				
27	Magnetic TPU S/W				

Total Price

\$1,236,092

Tax Amount (applicable to Line Items 2 - 24)

rate = 8.25%

\$79,903

Total Price with Tax

\$1,315,995

EXHIBIT C

CERTIFICATE OF SUBCONTRACTOR COMMITMENT

Cubic Transportation Systems, Inc. (Contractor) hereby certifies to the placement of subcontract/subcontracts to GFI Genfare (subcontractor) for the delivery of bus fareboxes and other related equipment. This certification is made in support of the Milestone No. 1 Progress Payment as described in Contract Appendix A – Critical Path Schedule, Table MX-1, “Municipal Agency Schedule of Milestones and Billings” as part of the Contract between the City of Torrance and Cubic Transportation Systems, Inc. on March 18, 2003.

By issuance of this Certificate and upon subsequent payment of the progress payment by the Affiliated Agency, Contractor and subcontractor extend to the Affiliated Agency a commensurate claim of interest against the future delivery of the equipment in accordance with the requirements of FTA Circular 4220.1.d, Section 12b. **“Progress Payments.”**

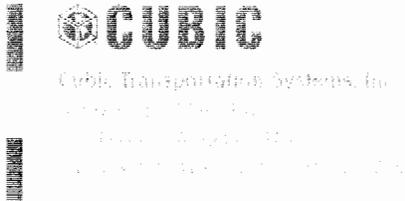
Cubic Transportation Systems, Inc.



S. E. Purcell
Vice-President, Contracts

3/24/2003

Date



April 12, 2011

TT11-013

Torrance Transit System
 Kim Turner, Transit Director
 City of Torrance
 20500 Madrona Avenue
 Torrance, CA 90503-3692

Subject: Cubic Contract Amendment Submission with accompanying Exhibits:

- Exhibit 1 – Revised Price Sheet
- Exhibit 2 – Revised Project Schedule

Reference: (1) City of Torrance Contract No. C2003-056
 (2) Cubic letter TT10-001, dated January 26, 2010

Dear Ms. Turner:

Enclosed with this letter are two copies of our joint Contract Amendment and its accompanying Exhibits for Torrance review and approval. Once approved, please have all Torrance signatories sign both copies of the Amendment and send **both originals** (with the Exhibits) back to my attention. Upon receipt, Cubic will countersign and return one original copy to your attention.

Please note that Exhibit 2 is a revised Schedule that includes updated project milestone and dates that were mutually agreed upon by the parties during today's Cubic/Torrance Transit conference call.

If any additional information is needed, please contact me at 858-627-4666 or mike.margro@cubic.com

Regards,

Michael Margro
 Contracts Manager