



(Board Copy)
Washington Metropolitan Area Transit Authority
METRO ELECTRONIC ACTION
DOCUMENT

IDENTIFICATION			
MEAD ID:	99271	ACTION:	Initiate & Award
AWARD VALUE:	(Not yet awarded)	CONTRACT: (Proposed)	
FUND SOURCES: (View)		CONTRACTOR:	
LAST MODIFIED:	02/07/2006		

DESCRIPTION	
SUBJECT:	Obtain Board approval to award contract modification to implement software changes.
PURPOSE:	To obtain Board of Directors approval to award modification of Contract C44444 to Cubic Transportation Systems to implement the NextFare 4 / Single Platform system.

ORIGINATION					
INITIATOR			DEPARTMENTAL APPROVAL		
RAMON ABRAMOVICH on 01/20/2006			Approved by COUCH , DAVID 02/03/2006		
PHONE:	202-962-1224	OFFICE:	IRPG	DEPT:	PDEC

COORDINATION (ROUTING)		
OFFICE	NAME	ACTION/DATE
(4110)	SALPEAS, PANAGIOTIS	Re-assigned 02/03/2006
IRPG (4710)	COUCH, DAVID	Approved 02/03/2006
PRMT (7410)	JACKSON, LUCY	Approved 02/03/2006
COUN (1410)	O'KEEFFE, CAROL	Approved w/ Comments 02/09/2006
(4110)	SALPEAS, PANAGIOTIS	Approved 02/10/2006

FINAL APPROVALS	
OFFICE	NAME/ACTION
PLN_DEV_CMTE	PANAGIOTIS SALPEAS (Not Yet Approved)
PLN_DEV_CMTE	PANAGIOTIS SALPEAS (Not Yet Approved)
PLN_DEV_CMTE	Approved for by PANAGIOTIS SALPEAS on 02/10/2006
BEMR	Approved for by HAROLD BARTLETT on 02/10/2006
GM	Approved for GMGR by GMGR CEO on 02/10/2006
BOARD	BOARD WMATA (Not Yet Approved)



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NARRATIVE

BACKGROUND:

On July 31, 2003 Contract C44444, Point-of-Sale (POS) System, Data Network Concentrator (DNC), and the Upgrade of the Regional Automatic Fare Collection (AFC) System was awarded to Cubic Transportation Systems in the amount of \$11.95 M (\$5.23 M for POS/DNC and \$6.72 M for AFC Upgrade). Under the requirement to upgrade WMATA's AFC, Cubic was to make the Authority's existing rail and parking systems software compatible with other systems intended for installation at WMATA's regional partners.

After extensive review and evaluation of various options available to the Authority, it is the general consensus of staff that WMATA should, instead of upgrading the Authority's legacy AFC software, obtain Cubic's latest Commercial Off the Shelf (COTS) product termed NextFare 4 along with Single Platform solution. This will require a modification in the amount of \$12.14 M increase in the contract price.

DISCUSSION:

The existing WMATA AFC System uses custom code, written in a software language that is almost obsolete and for which support is becoming increasingly difficult to obtain. The original contract requirement is for Cubic to update the customized software in the current, near obsolete code. This would allow WMATA to operate in the Regional SmarTrip System, but would result in a system that was based on custom software that would be difficult and expensive to upgrade, and would not be as robust and flexible as the remainder of the Regional SmarTrip System participants. Any future updates would require further custom work by Cubic and would be more expensive and time consuming and would carry us further away from standardization and what other agencies are using. Additionally, the WMATA system would lag behind the advancement of smart card fare collection technology in the industry which is moving rapidly to standard system architecture and the use of standardized smart cards. Should WMATA not be able to incorporate International Standards Organization (ISO) compliant standardized cards, it would continue to absorb higher cost for the proprietary Cubic SmarTrip card.

The move to Cubic's latest COTS product NextFare 4 / Single Platform solution would provide several benefits as detailed below:

- NextFare 4 / Single Platform solution will substantially improve the capability, flexibility and functionality including but not limited to implementing flexible fare changes and new transit products using the SmarTrip system.
- Will help the Authority move toward the ISO compliant smart cards that are available from multiple vendors resulting in significant savings as compared to the current proprietary Cubic SmarTrip card.
- Will eliminate the need to maintain a separate mainframe for the AFC, due to the fact that the Nextfare 4 / Single Platform solution will actually reside on the DNC thereby resulting in \$2.5 M one time capital savings and \$1.5 M annual operating savings.
- Will insure full operability and interoperability with the regional partners.
- The Authority will be using the same COTS product as the other major transit properties such as Los Angeles, San Diego, Minneapolis and Baltimore thereby increasing the likelihood of getting upgrades at a lower cost.

PRODUCT QUALITY AND SCHEDULE ASSURANCE:

Indisputable evidence that Cubic will deliver a product that will perform as intended

In an effort to assure that the product will perform, the Authority and the contractor's staff have reviewed the technical proposal extremely thoroughly and resolved all of the technical issues to the satisfaction of the Authority.

An amount of about \$8.5 M or about 75% of the total cost of this work will be placed in an escrow account and actually paid to the contractor only after the Authority has made sure that the project has been completed and is fully functional and ready for use by the public and authority staff.

Indisputable evidence that Cubic will deliver an acceptable product on the original schedule without delays

To ensure a timely delivery of a product that works, the Authority and Cubic have agreed on the following additional special provisions in the proposed modification for Nextfare 4 / Single Platform solution.

- The senior management from the Authority and from Cubic will be personally and directly involved in monitoring the progress of this critical project from the start through completion.
- Recent projects of fareboxes for the D.C. Circulator and the Conversion to Express Vendors were either completed on time or are progressing on time.
- For the first time, a special provision of liquidated damages at \$3,000/day has been included in the agreement.

Execute software maintenance agreements acceptable to all applicable regional partners:

- Provide combined leverage when dealing with Cubic.
- Provide regional partners the benefits of WMATA's experience/expertise.
- Consolidated Regional software maintenance agreement will reduce overall costs.

There are two additional staff positions which are required to support the region application of the NextFare 4 software. These positions will be discussed at the submission of the FY07 Capital Budget. The data collected from the fare systems at the regional agencies will be processed on the same system processing the data collected from the WMATA system. Additional support equipment, including increased memory, another report server, additional licenses for the software and similar equipment, is required to provide the additional capacity for the data collection and processing systems beyond the capacity currently required for processing only the WMATA data.

ALTERNATIVES:

Mandate completion of contract C44444 as written and signed. Staff strongly recommends against since it would require the update of customized software which is written in an obsolete code. Any future updates would require further custom updates by Cubic and would be more expensive and time consuming than updating the NextFare 4 software. The original contract as written would allow WMATA to operate in the Regional SmarTrip System, but would result in a system that was based on custom software that is not upgradeable, and would not be as robust and flexible as the remainder of the Regional SmarTrip System. Further the WMATA system would lag behind the advancement of smart card fare collection technology in the industry which is moving rapidly to standard system architecture and the use of ISO compliant regular and limited use smart cards. Should WMATA not be able to incorporate ISO compliant cards, it would continue to absorb higher cost for the Cubic proprietary SmarTrip card. The ability to participate in consortium ISO card procurements with other large transit, also offering considerable savings, would not exist. If WMATA does not migrate fare collection processing off the mainframe, an estimated \$2.5 M in capital costs and \$1.5 M in annual operating costs will continue.

PRIOR APPROVALS:

On January 16, 2003, the Board of Directors authorized award of a sole source contract, C44444, to Cubic Transportation Systems of San Diego, CA for a Point-of-Sale (POS) System, Data Network Concentrator (DNC), and the Upgrade of the Regional Automatic Fare Collection (AFC) System to support the Regional SmarTrip System.

On December 8, 2005, the Budget committee and on December 15, 2005, the Board of Directors approved the increase in the budget for the Regional Customer Service Project to implement NextFare 4.

IMPACT ON FUNDING:

Budget: Infrastructure Renewal
Project Title: Regional Fare Integration
Page: N/A

Budget Information	FY05 & Prior	FY06	Total
Budget Amount	\$ 26,900,000	\$ 12,500,000	\$ 39,400,000
This Action	\$ 0	\$ 12,142,942	\$ 12,142,942
Prior Obligation	\$ 20,729,052	0	\$ 20,729,052
Subtotal	\$ 20,729,052	\$ 12,142,942	\$ 32,871,994
Remaining Budget	\$ 6,170,948	\$ 357,058	\$ 6,528,006

SCHEDULE:

Contract calls for delivery of software, final acceptance and completion of contract within 26 months after NTP. Interim milestones include delivery of hardware to WMATA within 19 months after NTP and for completion of software testing in the QA (test) region within 20 months after NTP. Payments to the contractor will be put into an escrow account pending final acceptance of the system.

AFFIRMATIVE ACTION:Equal Employment Opportunity :

Contractor will be required to comply with Executive Order 11246, Revision 4

Disadvantaged Business Enterprise

The same Appendix B requirements in the original contract C44444 will apply to the work associated with this modification.

RECOMMENDATION:

To obtain Board of Directors approval to award modification of Contract C44444 to Cubic Transportation Systems to implement the NextFare 4 / Single Platform system.