



Planning, Development and Real Estate Committee

Board Action Item III-A

July 12, 2007

**Multi-Year Programs for the Upgrade of
Automatic Fare Collection System Equipment**

**Washington Metropolitan Area Transportation Authority
Board Action/Information Summary**

Action
 Information

MEAD Number:
99702

Resolution:
 Yes No

PURPOSE

Board approval to initiate and award competitive contracts for the procurement of required services, material and equipment for upgrade of Automatic Fare Collection (AFC) equipment. Staff will return to the Board for approval of modifications to existing sole source contracts.

DESCRIPTION

The AFC Equipment was last replaced on a large scale in the early 1990`s. Advances in technology, changes in the purchasing patterns of our customers and the need to replace obsolete parts have led to the requirement to upgrade the system. In addition, two recent initiatives issued by the Federal Government require that 1) Fare collection machines accept and dispense the new dollar coins, and 2) machines accept the new \$5 currency.

All of the AFC machines will be upgraded to accept the new coins and the new \$5 currency. Some of the machines will be converted to dispense durable plastic and paper Smart Cards and will be equipped in later years with the capability to accept Credit/Debit cards for payment.

A multi-year program has been developed that will bring the AFC System into a configuration that will fulfill long-term requirements. The program includes relocation/reconfiguration as well as upgrade/modification of Express Vendors and exit fares, and replacement of failing and obsolete gate displays, coin vaults, PIN pads and revenue transfer carts.

Staff will return to the Board for approval of modifications to existing Cubic contracts for software upgrades and Smart Card dispensing equipment upon negotiation of costs for these items.

FUNDING IMPACT

Program: Proposed FY08 Capital Improvement Program

Project: Fare Collection Rehabilitation

	FY08	FY09 -FY12	Total
Budget:	\$6,190,000	\$62,167,000	\$68,357,000
This Action:	6,190,000	18,787,000	\$24,977,000
Prior Approval:	\$0	\$0	\$0
Remaining Budget:	\$0	\$43,380,000	\$43,380,000

Remarks: Budget and funding beyond FY08 are subject to approval by the Board.

RECOMMENDATION

Board approval to initiate and award competitive contracts for the procurement of required services, material and equipment for upgrade of AFC equipment. Staff will return to the Board for approval of modifications to existing sole source contracts.



A Multi-Year Program to Upgrade the Rail Automatic Fare Collection System

Presented to the Board of Directors:

Planning, Development and Real Estate Committee

July 12, 2007





Purpose

- Introduce a multi part, multi-year program to upgrade the Automatic Fare Collection (AFC) system for a total cost of \$24.9M
 - Dollar Coin Acceptance
 - Validation of New Currency
 - System Upgrades
 - New Bill Handling Units
 - Credit/Debit Card Processing
 - SmarTrip® Dispenser Module
 - Replacement of Coin Vaults
 - Replacement of Revenue Transfer Carts





Federal Mandate – Dollar Coin

- Presidential Coin Act of 2005 requires transit agencies receiving federal funding to be capable of accepting and dispensing the dollar coins by January 2008
- In 1999 the Board rejected a voluntary program to convert the machines to have the ability to accept and dispense the dollar coin
- Status of Metro operations to accept and dispense dollar coins:
 - Bus: Ready
 - Rail: Upgrade to accept by January 2008 and dispense at a later date
 - Parking: Meter replacement will be included in the overall Parking Program





Early Release of New \$5 Bill

- Early Release of new \$5 currency scheduled for March 2008
- The Bill Handling Units (BHU's) throughout the Rail System must be updated to validate the new currency
 - Requires new software
- Approximately 800 older BHU's are no longer supported by the manufacturer and must be replaced
 - Parts will not be available after 2007
 - An arrangement will be made for the software to accommodate the 2008 release of new currency
 - Replace about 200 BHU's per year to a minimum of 600
- Above effort prepares Metro to accept the new \$20 bills to be released in three to four years
 - Will require another software update





System Upgrade

- Install module to dispense durable plastic Smart Cards in approximately 550 machines
- Install Smart Card dispensers to handle paper-based Smart Cards on approximately 550 machines
- Replace failing and obsolete modules such as Gate Displays, Coin Vaults, Debit Card PIN pads and Revenue Transfer Carts
- Pilot project to add touch screen displays to approximately six machines at selected terminal and transfer stations





Recommendation

- Authorize initiation and award of competitive contracts for the procurement of required services, material and equipment