

**Amendment 06 RFP Changes**

Change	Original RFP Page Number	Revised SOW Page Number	Section	Change	Text
1	131 para. 1	5	1.1	Deleted/Was	<ul style="list-style-type: none"> <li>Implement hardware that works with the current fare payment application.</li> </ul>
				Added/Now	<ul style="list-style-type: none"> <li>Implement hardware which seamlessly interfaces with the Cubic Tri-Reader 4 (TR4) to execute the proper patron-facing faregate actions based on the results of the media processing by the TR4.</li> </ul>
2	132 para. 2	5	1.1	Deleted/Was	The Contractor will be responsible for the delivery of a turnkey solution and will be responsible for coordination with WMATA's current fare payment system provider. This coordination includes legal agreements and responsibility for delivery of software modifications to the current fare system to support the system integration needed to deliver a solution where faregate functionality interfaces with the current fare payment application which manages WMATA's fare tariff and the distribution of web sales transactions, refunds, "hot listed" fare media, and transit benefit data to devices.
				Added/Now	The Systems Integrator shall supply Payment Processing Targets (PPT) that shall interface with the current WMATA payment application and the current Nextfare 5 backend system. The contractor shall work with the Systems Integrator to install and deploy these PPTs within the faregate such that the faregate correctly responds to the results of media processing by the PPT. The Contractor shall work with the Systems Integrator to develop an Interface Control Document (ICD) that shall outline the communications protocols, messaging methodology and formats used between the System Integrator's PPT and the faregate (SBC). The Contractor and the Integrator shall jointly be responsible for the development and testing of the interface.
3	135 para. 1	9	1.1.2	Deleted/Was	WMATA is currently operating MiFare Plus-based contactless smart cards that are configured with a Cubic security application. WMATA's fare system also accepts the Cubic Go in new faregates smartcard, an older smart card designed to interface with the Cubic payment target.
			1.1.2	Added/Now	WMATA may advance to the MiFare DESfire platform in the future, as well as implement a mobile app. The mobile fare payment platform will work with WMATA's existing infrastructure, allowing customers to tap their mobile device to the card readers on the faregate. The payment process is designed to be seamless and will have a similar experience to tapping a SmarTrip card today. Using the app, customers will be able to check fares, get real-time service information, and add money to their SmarTrip account instantly through Auto-Reload when the value is low.
4	136 para. 5	10	1.1.4	Deleted/Was	<p>The principle project constraints are:</p> <ul style="list-style-type: none"> <li>Interfacing with WMATA's current fare payment system</li> <li>Meeting aesthetic requirements to be complimentary to station's historical design which have landmark protections;</li> <li>Deploying equipment within WMATA's existing power and communication raceways and interfaces;</li> <li>Interfacing with station emergency alarm system; and</li> <li>Deploying equipment without disrupting revenue service or creating transition issues for WMATA's customers.</li> </ul>
			1.1.4	Added/Now	<p>The principle project constraints are:</p> <ul style="list-style-type: none"> <li>Interfacing with WMATA's current fare payment system</li> <li>Working closely with the Systems Integrator in the design, testing and implementation of systems.</li> <li>Coordinating with Systems Integrator in installing and interfacing Tri-Reader 4 in faregates.</li> <li>Coordinating with Systems Integrator in installing and interfacing Payment Validators to the Station Monitor. Interfacing with WMATA's current fare payment system</li> <li>Meeting aesthetic requirements to be complimentary to station's historical design which have landmark protections;</li> <li>Deploying equipment within WMATA's existing power and communication raceways and interfaces;</li> <li>Interfacing with station emergency alarm system; and</li> <li>Deploying equipment without disrupting revenue service or creating transition issues for WMATA's customers.</li> <li>Deploying equipment that provides conformity to all current ADA requirements.</li> <li>Although newly deployed equipment does not have to match the current equipment's height dimension, the deployed solution must conform to the latest NFPA 130 standards.</li> </ul>
5	136 para.6	10	1.1.4	Deleted/Was	Blank
				Added/Now	For this procurement, the Systems Integrator shall provide the Cubic Tri-Reader 4 (TR4) for installation within the faregates as well as Read Only Payment Validators that shall be installed in the stations that shall provide customer service functions.
6	136 para.8	10	1.1.4	Deleted/Was	Faregates overall footprint and height shall match the current faregates to ensure compliance with ADA and be complementary to the historic visual appearance of the originally designed faregates array.
			1.1.4	Added/Now	Faregates overall footprint shall match the current faregates to ensure compliance with ADA and be complementary to the historic visual appearance of the originally designed faregates array. The faregate height need not match the height of the current faregates, however, the solution much comply with current NFPA 130 and all other applicable standards and regulations.
7	138 Sec 1.3	13	1.3.	Deleted/Was	Section 1.3 was Deleted in its entirety
				Added/Now	Section 1.3 was Replaced in its entirety
8	141 para. 2	17	2.1.	Deleted/Was	Release of faregate barriers for passage through a faregate aisle shall be controlled by the Target Payment Processing Target (PPT) when a successful payment transaction is completed;
				Added/Now	Release of faregate barriers for passage through a faregate aisle shall be controlled by the Cubic TR4 Payment Processing Target when a successful payment transaction is completed;

9	143 para. 3	20	2.2.1	Deleted/Was	29. Payment Card Industry Data Security Standard (PCI DSS)
				Added/Now	Blank; 1-42 instead of 1-43 items listed.
10	144 list	20	2.3 E	Deleted/Was	E. Provide sensing capability to limit customer throughput to one customer per transaction and to distinguish support animals and baggage from other means of fare evasion
				Added/Now	E. Provide sensing capability to limit customer throughput to allow only one customer per transaction and to distinguish support animals and baggage from other means of fare evasion
11	144 list	21	2.3 P	Deleted/Was	Blank
				Added/Now	P. Provide internal registers for capturing and storing transaction data. Registers shall include but not be limited to number of patrons entry; number of patrons exit; number of student fares; number of concession fares; number of employee cards; number of entry incomplete transactions; number of exit incomplete transactions; number of entry rejects; number of exit rejects; hotlist cards detected entry; hotlist cards detected exit; number of autoloads performed. Register data shall be persistent at the faregate and be accessible from the faregate as well as the central faregate control system.A
12	145 list	21	2.3 Q	Deleted/Was	Blank
				Added/Now	Q. Forward device status events to the central faregate system for storing and monitoring.
13	145 list	21	2.3 R	Deleted/Was	Blank
				Added/Now	R. Constantly update and forward device current status to the central faregate system
14	145 list	21	2.3 S	Deleted/Was	Blank
				Added/Now	S. Make device history data available at the central faregate system;
15	145 list	21	2.3 T	Deleted/Was	T. Support the needs of all existing and future categories of Customers, including programs for specific types of Customers (students, customers with disabilities, employees, etc.) and fare structures, and fare products; SI Contractor
				Added/Now	T. Interface with Cubic TR4 and take the appropriate action, e.g. open barrier, keep barrier closed, present relevant displays, etc. based on result of media processing by TR4
16	145 list	21	2.3 U	Deleted/Was	U. Quickly and efficiently verify the validity of all fare media and provide the necessary payment communication to support faregate customer interfaces and the current system payment application
				Added/Now	U. Interface with Cubic TR4 and react accordingly (open barriers, keep barriers closed, present proper and relevant displays, etc.) as the TR4 process media in support of all existing and future categories of customers, including programs for specific types of customers (students, customers with disabilities, employees, etc.) fare structures and fare products
17	145 list	21	2.3 W	Deleted/Was	W. Securely accommodate and process fare media offered and/or distributed by WMATA or approved third parties
				Added/Now	W. Quickly and efficiently respond to the result of the Cubic TR4's processing as it verifies the validity of all fare media and provide the necessary payment communication to support faregate customer interfaces
18	145 list	22	2.3 FF	Deleted/Was	Blank
				Added/Now	FF. Be equipped with ground fault interrupt safety device
19	146 para. 2	22	2.4.1	Deleted/Was	Separate CDR Sessions may be scheduled as required. CDRL 2.4 The CDR package (or packages) shall address the following topics at a minimum:
				Added/Now	Separate CDR Sessions may be scheduled as required. During the CDR, the vendor shall coordinate with the Systems Integrator to develop and finalize an Interface Control Document which shall detail the interface between the PPT and the faregate, including all protocols, message formats, etc. used for the interface. CDRL 2.4 The CDR package (or packages) shall address the following topics at a minimum:
20	146 para. 2	22	2.4.1	Deleted/Was	Blank
				Added/Now	Proposed method, protocol and messaging format to be used in ICD and description of the efficacy of chosen methodology.
21	146 para. 3	23	2.4.2	Deleted/Was	Blank
				Added/Now	Finalized ICD design
22	148 para. 2	25	2.5.	Deleted/Was	All entry and exit transaction data shall be retained by the individual faregates until the data is completely and successfully transferred for central storage. Invalid fare media lists and central auto load transactions will be stored locally and shall be used to determine the validity of presented fare media, deny entry or to initiate Autoload transactions to fare media. The faregate memory shall store not less than 2 million of each list element.
				Added/Now	It shall be the responsibility of the Systems Integrator to have all entry and exit transaction data retained by the PPT until the data is completely and successfully transferred for central storage. Further, it shall be the Systems Integrator's responsibility to ensure that invalid fare media lists and central auto load transactions will be stored locally at the PPT and shall be used to determine the validity of presented fare media, to allow or deny entry or to initiate Autoload transactions to fare media. The Systems Integrator's PPT memory shall store not less than 2 million of each list element. The faregate shall interface with the PPT and execute the proper patron-facing actions (barrier movement / non-movement and required displays, based on the results of the processing of media by the PPT).

23 - A	150 para. 3	27	2.7.5	Deleted/Was	<p>The faregate shall fully interface with WMATA's current fare payment system. Communication with the current fare application central system shall be an integral element of the faregate. Communications between the faregates and the current central system is required for uploading payment transaction data and for downloading fare schedules, invalid fare media lists "hot lists", and Autoload list service transactions (web sales transactions, refunds, Smart Benefits value loads, etc).</p> <p>The PPT shall interface with faregate controller and customer interface applications to provide seamless interface between fare payment and faregate operational controls. The PPT shall be integral to the faregate and shall be housed within the faregate cabinet in such a manner as to not inhibit its required read range as defined in ISO 14443 A and B communication standard and so as to facilitate part replacement with 15 minutes should the unit fail.</p> <p>The PPT shall support all WMATA-issued SmarTrip media and support an option for a non-SmarTrip secure ISO 14443 A and B media. This option to process transactions for this media shall be dormant and only activated under the direction of WMATA.</p> <p>If the faregate is unable to process fare payment, the Customer display on the faregate shall display "Out of Service" and the "Usage Prohibited" illuminated display on the effected end of the faregate aisle shall be lit until the PPT failure has been cleared or faregate directional configuration is changed.</p> <p>The faregate shall also be designed to support a second PPT. Faregate power, wiring, and communication ports shall be fabricated so that a second PPT can be easily installed in the faregate. Faregate structural design shall include locations for punch out bezels and mounting hardware for the potential implementation of the second PPT. Design review documents will include design for this second payment target and First Article Testing will include demonstration of second PPT functionality.</p>
				Added/Now	<p>The faregate PPT shall fully interface with WMATA's current fare payment system. Communication with the current fare application central system shall be an integral element of the faregate PPT. Communications between the faregates PPT and the current central system is required for uploading payment transaction data and for downloading fare schedules, invalid fare media lists "hot lists", and Autoload list service transactions (web sales transactions, refunds, Smart Benefits value loads, etc). All the foregoing shall be the responsibility of the Systems Integrator. The faregate shall interface with the PPT, and using the protocols and messaging outlined in the ICD, respond appropriately based on the results of the fare media processing performed by the PPT.</p> <p>The PPT shall interface with faregate controller and customer interface applications to provide seamless interface between fare payment and faregate operational controls. The PPT shall be integral to the faregate and shall be housed within the faregate cabinet in such a manner as to not inhibit its required read range as defined in ISO 14443 A and B communication standard and so as to facilitate part replacement with 15 minutes should the unit fail.</p> <p>If the faregate PPT is unable to process fare payment, that information shall be communicated across the PPT/faregate interface using the messaging format and protocols outlined in the ICD. The Customer display on the faregate shall display "Out of Service" and the "Usage Prohibited" illuminated display on the effected end of the faregate aisle shall be lit until the PPT failure has been cleared or faregate directional configuration is changed.</p> <p>Each faregate aisle shall be equipped with a gigabit Ethernet switch capable of providing power via POE to all TR4s associated with that aisle. The switch shall be housed within one of the aisle's faregate cabinets and shall connect all TR4s associated with a single aisle as well as the faregate controller to the WMATA LAN/WAN.</p>
23 - B	152 para. 5	30	2.8.1	Deleted/Was	All transactional data shall be stored locally and shall be transmitted to the current fare payment system in real time or near real time and upon request from the central system. Non- fare transaction data shall also be stored locally and uploaded to the faregate central system in a scheduled manner and upon request.
				Added/Now	All transactional data shall be stored locally on the PPT and shall be transmitted to the Nextfare 5 centralcurrent fare payment system in real time or near real time and or upon request. from the central system. Non- fare transaction data such as faregate device status events and alerts shall be immediately transmitted to the faregate central system as they occur in the faregates. Faregate audit registers shall also be stored locally in the faregate's non-volatile memory. Audit register data shall be persistent in the faregate and shall be accessed by the faregate central system in a scheduled manner or upon request.
24	152-153 para. 6&1	30	2.8.2	Deleted/Was	<p>All data shall be stored in the faregate memory until it has been transferred to the central systems. In the event communications cannot be established with central systems for an extended period, data shall be retained locally, with storage for a minimum of 100,000 Customer transactions plus an equal number of event, audit and alarm transactions. Any locally stored data that is subject to PCI management shall be encrypted.</p> <p>Customer Transaction Data</p> <ul style="list-style-type: none"> <li>• All completed transactions, which have occurred at the device;</li> <li>• All incomplete transactions, including reason for rejection;</li> <li>• Additional information required to provide a complete audit trail for revenues and Smart Media.</li> </ul>
				Added/Now	<p>All transaction data shall be stored in the PPT memory until it has been transferred to the Nextfare 5 central systems. In the event communications cannot be established between the PPT and the Nextfare 5 central systems for an extended period, data shall be retained locally on the PPT, with storage for a minimum of 100,000 Customer transactions . During such an occurrence, the PPT shall also generate and transmit to the faregate controller using the messaging and protocols outlined in the ICD, a device status event indicating that a PPT to Nextfare 5 communications error has occurred. Audit registers shall be accessible at the faregate or from the faregate central system. Audit registers shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>• All completed transactions, which have occurred at the device;</li> <li>• All incomplete transactions, including reason for rejection;</li> <li>• Additional information required to provide a complete audit trail for revenues and Smart Media.</li> </ul> <p>Device Status Events shall be immediately transmitted to the faregate central system as they occur in the faregate. However, the faregate shall have the ability to store locally at a minimum 100,000 device status events with time stamps. Device status events shall include but not be limited to:</p>

25	153 para. 2	30	2.8.2	Deleted/Was	Operational Data and Events (stored as transactions)
				Added/Now	Operational Data and Events
26	153 para. 3	31	2.8.3	Deleted/Was	Each faregate shall monitor all fare media usages to prevent use of any unlimited ride media products for more than one concurrent trip within a defined time period at a station. All fare media shall be verified against this pass back rule. The control of the anti-pass back function shall be based on all usages and attempted usages. When this parameter is set to zero, pass back shall be deactivated and shall charge for each trip taken, regardless of the time between Smart Media taps. The pass back timer shall be configurable by smart media product and can be zero if required.
				Added/Now	Each PPT shall interface with the faregate as outlined in ICD to monitor all fare media usages to prevent use of any unlimited ride media products for more than one concurrent trip within a defined time period at a station. All fare media shall be verified against this pass back rule by the PPT and the PPT shall communicate to the faregate the proper action(s) to perform. The control of the anti-pass back function shall be based on all usages and attempted usages. When this parameter is set to zero, pass back shall be deactivated and shall charge for each trip taken, regardless of the time between Smart Media taps. The pass back timer shall be configurable by smart media product and can be zero if required.
27	154 para. 5	32	2.8.5	Deleted/Was	A push button shall be provided on the inside of the gate enclosure, away from the public and accessible by maintenance personnel when they open the barrier cabinet. This push button shall simulate an acceptable fare transaction and cycle the faregate one time (i.e. cause the barriers to open and close in the normal mode of operation).
				Added/Now	A push button shall be provided on the inside of the gate enclosure, away from the public and accessible by maintenance personnel when the faregate cabinet is opened. This push button shall simulate an acceptable fare transaction and cycle the faregate one time (i.e. cause the barriers to open and close in the normal mode of operation). The faregate shall provide a means for maintenance personnel to manually execute diagnostic tests of individual components within the faregate such as displays, drive motors and associated electronics. There also shall be included in the faregate a diagnostic that can be executed either by maintenance personnel at the location of the faregate, or by other authorized WMATA personnel remotely via the faregate central system, that shall check the status and serviceability of the PPT.
28	154 Heading	32	2.9.	Deleted/Was	Communication System
				Added/Now	Faregate Communication System
29	154 para. 7	32	2.9.	Deleted/Was	Faregates shall communicate with the current fare payment application via and back end systems via CAT 6 Ethernet from the faregates to WMATA's LAN and WAN infrastructure. The Contractor will be responsible implementing current system modifications to support this connectivity and for coordination with WMATA to establish IP addressing within WMATA's network. Faregates communication shall include secure authentication protocols with all faregate central system and payment application central system.
				Added/Now	The contractor shall supply one POE- capable gigabit Ethernet switch per faregate aisle. The switch technical information shall be submitted to WMATA for review and approval CDRL. The PPTs associated with a single aisle and the faregate controller (SBC) for that aisle shall be connected to this switch via CAT6 cabling. All connected devices shall communicate with their respective back end systems through the switch, which shall be attached to the WMATA LAN/WAN infrastructure. Faregate SBCs shall communicate with the faregate control system back end and the PPTs shall communicate with the Nextfare 5 back end system. The Contractor will be responsible implementing current system modifications to support this connectivity and for coordination with WMATA to establish IP addressing within WMATA's network. Faregate SBC as well as PPT communications to their controlling back end systems shall include secure authentication protocols.
30	154 para. 9	32	2.9.	Deleted/Was	Upon successful re-connection of network operations, all stored transaction data (e.g., alarm, event, sales) shall be automatically transmitted to the current central system and to the faregate central system.
				Added/Now	Upon successful re-connection of network operations, all stored data (e.g., alarm, event, sales) shall be automatically transmitted to the faregate central system.
31	155 para. 2	33	2.10.1	Deleted/Was	Blank
				Added/Now	Each faregate cabinet shall have at a minimum one PPT installed. The faregate shall be designed to accommodate the mounting of PPTs that have a diameter no less than 87 millimeters and a height of no less than 30 millimeters. PPTs shall be connected via CAT6 ethernet cabling to a POE capable gigabit Ethernet switch which shall be supplied with the faregate. The faregate can optionally power the PPT from a DC power supply within the faregate. This supply shall be capable of providing a DC voltage in the range of 12 to 36 VDC.
32	153 para. 7	37	2.13.	Deleted/Was	Blank
				Added/Now	The contractor shall assume a 180-day lead time for all parts originating from the PPT manufacturer.
33	169 CDRLs	49	2.29.	Deleted/Was	CDRL 2-1; PCI DSS Compliance Assessment; Section 2-3; PDR, FDR; No Approval Required
				Added/Now	Blank
34	171 para. 2	50	3.1.	Deleted/Was	Both devices shall be comprised of commercially available electronic devices and the portable devices shall be equipped with protective casings that provide protection from predictable environmental impacts. The devices shall be configured or equipped with hardware that will read WMATA fare media and allow Station Managers to see fare media entry/exit status, account balance, and any stored value fare media.
				Added/Now	Both devices shall be comprised of commercially available electronic devices and the portable devices shall be equipped with protective casings that provide protection from predictable environmental impacts.
35	171 list	50	3.2.1	Deleted/Was	B. Capability to read WMATA issued fare media and employee identification cards
				Added/Now	Blank

36	171 list	50	3.2.1	Deleted/Was	G. Fare card reading capability for customer support inquiries
				Added/Now	Blank
37	171 list	50	3.2.1	Deleted/Was	J. Secure connectivity to faregate independent of WMATA WAN and LAN Networks
				Added/Now	H. Secure connectivity to faregate independent of WMATA WAN Networks
38	172 list	50	3.2.2	Deleted/Was	B. Capability to read WMATA issued fare media to support customer service inquiries;
				Added/Now	Blank
39	172 para. 3	51	3.3.1	Deleted/Was	Station terminals shall be compact computers with touch screen displays and keyboard to support secure log-in, faregate management applications, and dashboard displays of device events and transactions.
				Added/Now	Station terminals shall be compact computers with touch screen displays and keyboard to support secure log-in, faregate management applications, and dashboard displays of device events and transactions. Station terminals shall also interface with the Payment Validators (PV) within the station such that when media is read and analyzed at the PVs, the same information shall be made available and displayed at the station terminal.
40	173 para. 3	52	3.3.2.4	Deleted/Was	The device shall include applications to faregate controls and fare media customer support. Faregate control applications shall include placing faregates in and out of service, changing the entry/exit directional configuration of faregates, opening and closing faregate, and monitoring faregate alarms and events. Customer support applications include reading and displaying the content of WMATA fare media including, stored entry/exit transactions, account balances, and valid fare products.
				Added/Now	The device shall include applications to control monitor faregates. Faregate control applications shall include placing faregates in and out of service, changing the entry/exit directional configuration of faregates, opening and closing faregate, and monitoring faregate alarms and events.
41	174 para. 4	53	3.4.	Deleted/Was	3.4 Media Reading The portable station manager device shall have a commercially available ISO/IEC-14443 compliant Type A and B contactless Payment Processing Target (PPT) or equivalent fare media reader. The SMP shall be either an integral component of the device or a separate accessory that attaches directly to the PSMGC. As a separate accessory, the PPT shall lock into place into the device casing so as to prevent unintentional disconnection. Placement of the PPT shall not inhibit use of other features of the device. It is understood that the design life of consumer grade PPTs and MSR, are of relatively short duration and replacement/upgraded models are provided for these devices on a semi-regular basis by the manufacturers. If the models of these devices are not available at time of the approval of the Final Design, Contractor shall have the responsibility to provide equivalent devices that meet industry standards and all functional requirements at the time of Final Design.
				Added/Now	Blank
42	174 para. 9	55	3.6.	Deleted/Was	3.6 Device Security Devices shall not be operational until a proper logon has been made to the device by a valid user. To activate the portable station manager device for use, the user shall logon to the device with, as a minimum, a username, and password. Employee identification smart cards may also be used as part of the logon process but a portion of the logon shall require data entry by the user.
				Added/Now	3.5 Device Security Devices shall not be operational until a proper logon has been made to the device by a valid user. To activate the portable station manager device for use, the user shall logon to the device with, as a minimum, a username, and password. WMATA IT deploys Absolute DDS security on its portable assets. During design reviews, the contractor shall work with WMATA IT prior to the acquisition and delivery of the PSMGC devices, who will supply the configuration details for ensuring that the equipment supplied by the contractor has Absolute DDS security enabled on the PSMGC all devices.
43	175 para. 3	55	3.6.2	Deleted/Was	3.6.1 Log-on The device shall remain inactive and unable to perform any functions unless a proper logon has been completed as follows: • The user will enter their unique user ID, a minimum of 6 characters, or present employee fare media card and press the "ENTER" key.
				Added/Now	3.5.1 Log-on The device shall remain inactive and unable to perform any functions unless a proper logon has been completed as follows: • The user will enter their unique user ID, a minimum of 6 characters and press the "ENTER" key.
44	177 para. 1	57	4.1.	Deleted/Was	The objective of the Test Program is to ensure that all hardware, software, interfaces, supporting equipment, and other system elements furnished under this Contract meet all specified requirements within this document. The Contractor shall conduct all testing and maintain responsibility for satisfactory completion of the testing and system implementation. WMATA and/or its designated representatives will witness any and all tests, as determined by WMATA. WMATA and/or its representatives may, at any time during the duration of this contract, perform additional testing as determined by WMATA.
				Added/Now	The objective of the Test Program is to ensure that all hardware, software, interfaces, supporting equipment, and other system elements furnished under this Contract meet all specified requirements within this document. The Contractor, in conjunction with System Integrator, shall conduct all testing and maintain responsibility for satisfactory completion of the testing and system implementation. The systems integrator shall supply two testing tools. One of these shall be used to test the interface between the PPT and the faregate, monitoring, recording and displaying this traffic to validate that the messaging in both directions conforms to the ICD. The second test tool shall be a Nextfare 5 simulator, a tool that will mimic the actions of a full Nextfare 5 back end. It shall be used to create a testing environment for the faregates when an actual full Nextfare 5 system is not present. This tool shall be used by the contractor during FAT. WMATA and/or its designated representatives will witness any and all tests, as determined by WMATA. WMATA and/or its representatives may, at any time during the duration of this contract, perform additional testing as determined by WMATA.
45	178 list	58	4.1.4	Deleted/Was	B. Test environmental conditions;

				Added/Now	B. Test environmental conditions with PPT targets installed;
46	180 para. 8	61	4.5.	Deleted/Was	The purpose of this test shall be to demonstrate that the system furnished and installed provides all functions, features and requirements as specified. The FAT shall be performed at the Contractor's facility in the United States.
				Added/Now	The purpose of this test shall be to demonstrate that the system furnished and installed provides all functions, features and requirements as specified. The primary tool that shall be used during this test shall be the Nextfare 5 simulator, which shall mimic the actions and behaviors of a full Nextare 5 back end system. The simulator shall connect to the faregate systems to verify and confirm the proper operation and response of faregates in a testing environment. It shall be provided to the contractor prior to FAT. The FAT shall be performed at the Contractor's facility in the United States.
47	187 para. 1	67	4.5.6	Deleted/Was	The software tested shall be complete and ready for delivery to WMATA. All potential functions and operational situations shall be included in the test in order to demonstrate that the interfaces meet all of the system requirements. All instances of performance, which do not meet the specified requirements shall be identified by the Contractor, and included in the test report. Corrections required as a result of the testing shall be approved by WMATA and performed by the Contractor prior to delivery of any additional equipment.
				Added/Now	<p>During this testing the Systems Integrator shall be responsible for correcting any issues related to the behavior and operation of the PPT, including (but not limited to):</p> <ul style="list-style-type: none"> <li>• PPT authentication to the Nextfare 5 backend</li> <li>• Media validation</li> <li>• Current Fare-table downloading and execution</li> <li>• Hotlist downloading and execution</li> <li>• Download and issuance of Autoloads Transactions upload to Nextfare 5</li> <li>• Detection and processing of concession fare media</li> <li>• Detection and logging of invalid media</li> <li>• Time synchronization with designated time server</li> <li>• Download and execution any other required operational tables</li> </ul> <p>During this testing, the faregate contractor shall be responsible for correcting any issues related to the operation of the faregate hardware and software, and the faregate control system including (but not limited to);</p> <ul style="list-style-type: none"> <li>• The execution of locally and remotely initiated faregate diagnostics</li> <li>• The execution of locally and remotely faregate configuration commands</li> <li>• The forwarding of device alarms and alerts to the faregate control system</li> <li>• Correct responses to the result of media processing (open barriers or prohibit opening) as determined by PPT</li> <li>• Correct operation with station emergency system</li> <li>• Incrementing of correct audit registers based on transaction types</li> <li>• Authentication to faregate control system.</li> <li>• Time synchronization with designated time server</li> <li>• Presentation of proper displays and indicators based on current processing or faregate status</li> </ul> <p>During this testing the contractor and the systems integrator shall jointly share responsibility for correcting any issues related to or arising from communications across the faregate to PPT interface.</p> <p>All instances of performance, ... equipment.</p>
48	187 para. 2	69	4.5.7	Deleted/Was	• Bankcard - Contactless credit/debit smart media and Open Payment smart media.
				Added/Now	Blank
49	187 para. 3	69	4.5.7	Deleted/Was	In addition, the cycle test shall also include not less than 10% additional transactions with invalid media. The invalid media shall be verified against each type of equipment, which reads and verifies smart media as valid for a particular mode of transportation service. Issue of smart media shall include the storage of the validity information in the CDS account. Cycling Test Plan CDRL 4-4 is due 90 days before planned testing.
				Added/Now	In addition, the cycle test shall also include not less than 10% additional transactions with invalid media. Cycling Test Plan <b>CDRL 4-4</b> is due 90 days before planned testing.
50	187 tbl 4-3	69	Tbl 4-3	Deleted/Was	71 SM Accept One Way Media 25 2
				Added/Now	Blank
51	187 tbl 4-3	69	Tbl 4-3	Deleted/Was	76 SM Reject depleted/expired/used OW/RT Media 25 2
				Added/Now	Blank
52	189 para. 2	71	4.8.	Deleted/Was	This test will be performed by the Contractor at an observed by WMATA or its appointed
				Added/Now	This test will be performed by the Contractor at and observed by WMATA or its appointed
53	189 para. 3	71	4.8.	Deleted/Was	A three faregate pilot deployment at three different mezzanines will be done prior to faregate installation to verify that faregates and central system applications preform according to requirements. One of the three pilot faregates shall be an ADA faregate.
				Added/Now	A three faregate pilot deployment at 10 different mezzanines will be done prior to faregate installation to verify that faregates and central system applications preform according to requirements. One of the 10 pilot faregates shall be an ADA faregate.
54	191 para. 1	74	5.0.	Deleted/Was	All such elements shall be incorporated into the deployment planning deliverables.

				Added/Now	All such elements shall be incorporated into the deployment planning deliverables. During deployment, the Systems Integrator shall be responsible for implementing all configuration changes in the Nextfare 5 central system, that are required to support all newly deployed field devices. WMATA shall be responsible for making the necessary configuration changes in the Station Operators Console (SOC) to support the adjustments made to the equipment in stations, including device de-commissioning, during the deployment of new faregates. WMATA shall also be responsible for furnishing the schedule of IP address that are to be used for all newly deployed devices.
55	207 Header	91	7.0.	Deleted/Was	7 Program Management
				Added/Now	7 Program Management and Interface Control Document (ICD) Support
56	208 list	92	7.1.2	Deleted/Was	Blank
				Added/Now	E. The PMP shall include early support and collaboration for the development of the ICD to be delivered by the System Integrator. The contractor shall in addition review the 60% design of the ICD and provide feedback.
57	209 para. 4	94	7.1.4	Deleted/Was	Blank
				Added/Now	The Master Program Schedule shall incorporate into its task the items from the Systems Integrator schedule.
58	222 para. 1	107	8.1.	Deleted/Was	<p>The Contractor will be responsible for providing system support services and parts repair or replacement maintenance support through the system warranty period that extends for one year after the full deployment and system acceptance of faregates and supporting systems. The Contractor shall be responsible for all corrective and preventative maintenance of faregates for a period of 90 days after the completion of faregate deployment and final acceptance.</p> <p>WMATA shall also have the option of requesting ongoing faregate maintenance support for up to 5 years. Should WMATA elect to contract for ongoing fare system maintenance support services, the Contractor shall provide ongoing on-site technical support and parts bench maintenance in accordance with response time requirements and device availability metrics defined here.</p> <p>In the event that WMATA does not choose to exercise option for extended warranty maintenance, the Contractor shall gradually transition maintenance responsibilities to WMATA technicians for the 90 day period after the final faregate has been installed. During this period, the Contractor shall continue to respond to maintenance requests but will oversee diagnostics and repairs done by WMATA staff unless otherwise directed.</p>
				Added/Now	<p>WMATA is interested in exploring options to contract Faregate Maintenance and Parts Maintenance Services. In the base contract, the Contractor shall be responsible for all faregate and supporting system maintenance through system final acceptance (90 days after the completion of device deployment or until all deployment punch list items are closed). Additionally, as part of the base contract, the Contractor shall be responsible for one year parts warranty that covers the repair and replacement all faregate modules and components that are not classified as consumable. Finally, the base contract maintenance services will include 5 years of software maintenance. At WMATA's sole discretion, the Contractor will be required to provide ongoing maintenance services.</p> <p>Ongoing parts bench maintenance services will begin at the end of the one year parts warranty and extend for a base period of 4 years with an additional 5 one year options. Ongoing field maintenance service (corrective and preventative maintenance) for deployed devices will have an initial period of 5 years with an additional 5 one year options. WMATA will make the final determination of this option not less than 180 days before planned final system acceptance. WMATA requires the contractor to transition the responsibilities for these services to WMATA or to another WMATA-approved entity at the conclusion of the performance period of the Support Services Contracts.</p> <p>Accordingly, at the conclusion of the Support Services performance period, the Contractor shall, at no charge, turn-over to WMATA all items used by the Contractor to perform the Support Services defined in this Section, including but not limited to, manuals, procedures, computers, applications, devices, tools and vehicles.</p> <p>In the event that WMATA does not choose to exercise options for extended maintenance services, the Contractor shall gradually transition maintenance responsibilities to WMATA technicians for the 90 day period after the final faregate has been installed. During this period, the Contractor shall continue to respond to maintenance requests but will oversee diagnostics and repairs done by WMATA staff unless otherwise directed.</p> <p>Not less than thirty (30) days prior to the expiration of the warranty performance period, the Contractor shall turn-over to WMATA all items used by the Contractor to perform the Support Service including, but not limited to, manuals, procedures, spare parts, consumable parts, and tools. Contractor will have the use of such items until that performance period expires.</p>
59	222 para. 5	107	8.1.1	Deleted/Was	<p>The Contractor shall provide a point-of-contact that can be contacted by WMATA personnel on a 24/7 basis for each of the Support Services performed.</p> <p>The Contractor shall submit a schedule each month of the designated point-of-contact at all times of each day including the phone number for contacting the individual.</p>
				Added/Now	<p>The Contractor shall provide a point-of-contact that can be contacted by WMATA personnel on a 24/7 basis for each of the Support Services performed. The point-of-contact shall be the individual in charge of local Contractor personnel at the time of the call.</p> <p>The Contractor shall submit a schedule each month of the designated point-of-contact at all times of each day including the phone number for contacting the individual.</p>
60	222 Header	108	8.2.	Deleted/Was	8.2 Maintenance Services
				Added/Now	8.2 Base Contract Maintenance
61	222 para. 6	108	8.2.	Deleted/Was	The Contractor will be responsible for all preventative and corrective maintenance on installed devices for a period of 90 days after the devices installation acceptance. The contractor shall

				Added/Now	The Contractor will be responsible for all preventative and corrective maintenance on installed devices for a period of 90 days after the devices installation acceptance. Should WMATA choose not to exercise the contract for ongoing maintenance services, the contractor shall ...
62	222 para. 7	108	8.2.	Deleted/Was	CDRL 8.1. The Contractor shall submit a Spare Parts Catalog with the pricing and shipping requirements for each catalog item. CDRL 8.2. The Contractor shall also provide recommended spare parts and maintenance consumable items to support one year maintenance service for installed devices. CDRL 8.3.
				Added/Now	CDRL 8.1. As devices are deployed in the system, the Contractor shall maintain sufficient resources to respond to all service hour corrective maintenance needs and perform all preventative maintenance as per maintenance manuals. The Contractor shall maintain all maintenance records during this period. During this period the Contractor shall be responsible for the local storage and inventory management and control of spare parts. Should WMATA choose not to implement the Ongoing Maintenance Support Option, the Contractor shall turn over all spare parts to WMATA. The Contractor shall submit a Spare Parts Catalog with the pricing and shipping requirements for each catalog item. The Spare Parts Catalog shall clearly distinguish parts that are repairable from consumable parts that must be replaced periodically or upon failure. <b>CDRL 8.2.</b> The Contractor shall also provide recommended spare parts and maintenance consumable items to support one year maintenance service for installed devices. <b>CDRL 8.3.</b>  At WMATA's sole discretion, the Contractor shall provide continued parts repair and replacement for an initial period of 4 years with an additional 5 one year option periods. During the period of performance where the Contractor is responsible for corrective maintenance service, the Contractor shall have fully qualified technicians on-call during WMATA revenue service hours and shall respond to service requirement within 2 hours of an out of service event. The Contractor will be responsible for all preventative and corrective maintenance on installed devices for a period of 90 days after the devices installation acceptance. Should WMATA choose not to exercise the contract for ongoing maintenance services, the Contractor shall gradually transition device maintenance responsibilities to WMATA employees after the 90 day warranty expires on installed equipment. The Contractor shall submit a Warranty Maintenance Plan detailing staffing plan, communication protocols, and approach to meet requirements.
63	224	108	8.2.2	Deleted/Was	Upon completion of the post deployment maintenance period, the contractor shall the Contractor shall provide an inventory of spare parts. CDRL 8-4.
				Added/Now	Warranty Period Maintenance Requirements Through system deployment and for a period not less than 90 days after system deployment or until all punch list items are closed and WMATA issues final system acceptance, the Contractor shall be responsible for all system maintenance. These maintenance activities shall be based on the maintenance information provided in the maintenance manuals provided by the Contractor as well as services needed to address all system corrective action repairs.  Initial Warranty Period tasks include: <ul style="list-style-type: none"> <li>• Preventive Maintenance: Perform field and bench-level preventive maintenance on all devices and components installed as a part of the faregates deployment.</li> <li>• Field and Bench-level Corrective Maintenance: Perform all field and bench-level troubleshooting and repairs on all equipment installed as part of the faregate deployment.</li> <li>• Emergency Response: Respond on-site to calls from WMATA.</li> <li>• Maintenance Reports: Submit weekly and monthly maintenance reports detailing corrective maintenance actions and compliance with device preventative maintenance requirements.</li> <li>• Spare Parts Inventory Management: Manage the inventory of spare parts, materials and consumables that are required for the continued operation of faregates. Bench level troubleshooting, repair and if needed replacements of all parts, modules and systems installed as part of the faregate deployment.</li> <li>• Software Maintenance and Upgrades: Repair, test and load existing, new, modified or upgraded software, firmware and data tables for the installed faregates.</li> <li>• Technology Refreshment Services: Perform maintenance and provide software upgrades on all system devices and/or replace devices with new to ensure that all faregates will perform reliably in full revenue service.</li> </ul> The Contractor shall be responsible for the storage and management of spare parts and maintenance consumables through this period. Should WMATA choose not to implement maintenance options and there is a period where WMATA and the Contractor Maintenance Technicians share maintenance responsibilities, the Contractor shall be responsible for the management of all spare parts and materials until parts and materials are officially turned over to WMATA. Upon completion of the post deployment maintenance period, the contractor shall provide an inventory of spare parts. CDRL 8-4. The Contractor shall turn over all spare parts and consumables to WMATA at the end of the 90 day warranty period and be responsible for restoring the spare parts to recommended quantities as established in CDRL 8-3
64	223 para. 7	109	8.2.2	Deleted/Was	Through system deployment and for a period not less than 90 days after system deployment or until all punch list items are closed and WMATA issues final system acceptance, the Contractor shall be responsible for all system maintenance. These maintenance activities shall be based on the maintenance information provided in the maintenance manuals provided by the Contractor as well as services needed to address all system corrective action repairs.
				Added/Now	Initial Warranty Period tasks include:
65	224 para. 4	110	8.3	Deleted/Was	The Contractor shall provide ongoing software maintenance services for a period of 5 years after system acceptance. This includes all software
				Added/Now	The Contractor shall provide ongoing software maintenance services for a period of 3 years after system acceptance with two additional one year options. This includes all software and firmware installed on faregates, software supporting faregate centralized functionality, software supporting Station Terminals and Station Manager Portable Devices. During this period the Contractor shall be responsible for insuring that all software and firmware, including 3rd Party Software remains fully operational and ensure that patches and updates are installed in accordance to developer recommendations. Software Maintenance services do not include software maintenance for PPT and PV devices, but does include testing and coordination for PPT and PV updates to ensure that faregate applications are not impacted by PPT and PV software changes.
66	225 para. 2	111	8.4.	Deleted/Was	The Contractor shall provide monthly reports of all software maintenance actions, summaries of software updates and patches, and documentation of the most current software version for all system software and firmware.



				Added/Now	<p>8.4 Software Maintenance</p> <p>The Contractor shall provide software maintenance services for a period of 5 years after system acceptance and, at WMATA’s direction, support five additional one year options. This includes all software and firmware installed on faregates, software supporting faregate centralized functionality, software supporting Station Terminals and Station Manager Portable Devices. During this period the Contractor shall be responsible for insuring that all software and firmware, including 3<sup>rd</sup> Party Software remains fully operational and ensure that patches and updates are installed in accordance to developer recommendations. Software Maintenance services do not include software maintenance for PPT and PV devices, but does include testing and coordination for PPT and PV updates to ensure that faregate applications are not impacted by PPT and PV software changes.</p> <p>The Contractor shall be on-call 24 hours to respond to emergencies. An emergency is an event in which WMATA is unable to collect revenue. The Contractor shall respond to other software events within 2 hours of a service call during WMATA week day business hours from 8:30 am to 6:00 pm Eastern Time.</p> <p>The Contractor shall also respond to software changes and system enhancements as requested by WMATA. Per this agreement a labor pool of 1000 Software Engineering and Programming hours will be available to be used at WMATA’s discretion for the development and testing of software changes and system enhancements. All other Software Maintenance and support requests will delivered as part of the annual Software Maintenance Agreement which will be invoiced monthly at an agreed upon flat fee.</p> <p>While the Extended Software Systems Support services are in effect:</p> <ul style="list-style-type: none"> <li>• All commercially available software updates (scheduled and unscheduled) for Contractor-developed software shall be provided to WMATA for installation, at their discretion, after independently testing such updates. No hours shall be deducted from the labor bank for these software updates.</li> <li>• Software updates to correct all software Defects evidenced while installing a change order, and opened by WMATA and accepted by the Contractor, shall be tested and released to WMATA for independent verification and installed at WMATA’s discretion.</li> </ul> <p>The Contractor shall provide monthly reports of all software maintenance actions, summaries of software updates and patches, and documentation of the most current software version for all system software and firmware. CDRL 8-5.</p>
67		112	8.4.1	Deleted/Was	Blank
				Added/Now	<p>Spare Parts Inventory Management</p> <p>Spare parts will be replenished through the parts warranty with WMATA. The Contractor shall be responsible for all parts management for bench level parts diagnostics, repairs and replacement. All spare parts will be stored by the Contractor but will remain the property of WMATA and shall be returned to WMATA at the end of the contract term. All spare parts used by the Contractor shall be used in a “first-in first-out” inventory management process.</p> <p>During the period of this contract, the Contractor shall keep a sufficient supply of spare parts on hand to ensure the unimpeded availability of Faregate equipment. This inventory shall include a sufficient number of operational spares to support timely revenue servicing of the equipment.</p> <p>The Contractor and WMATA shall jointly inventory the type, quantity, and condition of the spare parts components, modules, consumables, and equipment on hand at the commencement of the Contract. The Contractor shall be responsible for maintaining electronic records of all spare parts, components, modules, consumables, and equipment in an inventory control system. This shall include identification of the location (shop, counting room, at Contractor facility for repair, inventory, technician supplies, armored truck, or equipment unit and equipment type) of all spare parts in WMATA’s inventory.</p> <p>Changes in inventory, including the purchase of replacement parts and the disposal of non-serviceable units, shall be included in the end-of-month reports. The Contractor shall inspect and test repaired or replaced spare parts as a condition of acceptance upon delivery to ensure that the products meet the requirements of the Faregate Technical Specification.</p> <p>At the conclusion of this contract, the Contractor and WMATA shall again inventory the type, quantity, and condition of spare parts. It shall be the Contractor’s responsibility to ensure that quantities in this final inventory are the same as the initial inventory and conditions of the spare parts. If spare parts are missing or damaged, the Contractor shall, at their cost, purchase or repair spare parts to bring inventory levels back to the standards recorded at the commencement of this maintenance Contract. WMATA will review any requested exceptions.</p> <p>For the period of this Contract, the Contractor shall be responsible for maintaining the quantities of parts in inventory. Should WMATA choose not to extend the parts warranty, the Contractor shall supply WMATA with any necessary replacement parts (above those needed to support the Maintenance Program) at the prices submitted on the Contractor’s Spare Parts Price Form. If a required part or component is no longer available from a third party supplier to the Contractor, the Contractor shall identify or develop a compatible replacement solution that retains the overall functionality of the original part or components at a price that is acceptable to WMATA.</p>
68	225 para. 8	112		Deleted/Was	Blank

				Added/Now	<p>At WMATA's sole discretion, the Contractor shall provide ongoing parts repair and replacement for all non-consumable parts. Parts repair and replacement services shall include:</p> <ul style="list-style-type: none"> <li>• Shipping costs to ship failed parts removed from the field;</li> <li>• Testing/troubleshooting parts submitted for repair;</li> <li>• Parts repair or replacement;</li> <li>• Parts tracking and monthly reporting of all repair actions; and</li> <li>• Bench level testing for parts firm ware updates.</li> </ul> <p>The Contractor deliver a parts management system that maintains an active inventory of all parts that are under the service contract that identifies the location and status parts submitted for repair. The Contractor shall provide monthly reports on the disposition of all parts submitted for repair. CDRL 8-6.</p>
69	14 Section	Sec 14	14	Deleted/Was	Section 14 Evaluation Criteria was Deleted in its entirety
				Added/Now	Section 14 Evaluation Criteria was Replaced in its entirety (see attached)