

**ADDENDUM NO. 2**

March 11, 2019

RE: RFI 031.19.B5 Enterprise Print Management Solution

FROM: Purchasing Office  
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TO: PROSPECTIVE BIDDERS

This addendum modifies the Original RFI Documents as noted below.

1. **INSERT:** Questions and Answers – March 11, 2019

	Question	Answer
1	What are your contractual obligations from your current service and supply vendors that we need to be aware of? Current Lease agreements, Maintenance contracts, Supply contracts, etc.	All leases have run their course. HCPSS owns all print equipment. HCPSS presently has service and repair contracts for all print devices valid though disposition of equipment being serviced.
2	Explain the current badging systems? Are they centralized systems identify the teachers that enter the buildings?	Yes. The badging system is centralized.
3	What frequencies are used for RFID?	125 khz
4	What type of authentication servers are used?	Currently using Equitrac which receives user data from Active Directory.
5	How are all of the schools interconnected? 1 network or multiple?	There is one network with 2 vlans for administration and instruction for students.
6	Is the current fleet of devices monitored? If so, how?	Yes via Equitrac and FMAudit.
7	How many vendors are you currently using for MPS?	1 for MFDs and Duplicators 1 for HP Printers
8	Are supplies included in your current contract?	Yes for Meridian MFPs.
9	While there is an inventory listing of all multi-function hardware devices, your RFI also mentions approximate fleet of 4000+ printers: May we please have an inventory listing of your printer fleet?	See attached report HCPSS_Printer_Report_8mar19.xlsx
10	Are you presently using any data collection agent (like FM Audit, Print Audit, etc.) to capture your total printing environment?	FM Audit. See meter report attached to RFI.

	Question	Answer
	<p>May we have a copy of the data collection report?            (This should provide us a volume report by model on the printers, MFP's and digital duplicators)            If no such collection being done, may we have breakdown of volumes by model please?</p>	
11	<p>As part of the scope of our response, we would detail implementation and steady state plans of action: Can you address whether your MFDs and printers are owned or on lease?            May we have a report of the expiration dates if on lease?</p>	All equipment is owned.
12	<p>Assuming next step would be vendors chosen for an RFP response: is Howard County Public Schools guided towards any T &amp; Cs for a consortium or the State of Maryland contract?</p>	The next step is to establish a Solution from the various RFI respondents. Once established, HCPSS will solicit proposals through an RFP process.
13	<p>What is the primary use for the digital duplicators?</p>	High volume jobs
14	<p>Please provide a description of the goals of the organization with respect to Copying, Printing, Faxing, Scanning, and Reporting.</p>	<p>First goal: Understand the TCO for all printing            Second goal: Reduce cost</p>
15	<p><b>With respect to your organization:</b>            a. How many total users need to be considered for this project?</p>	12,000 + students
16	<p><b>With respect to user identification:</b>            a. Does the organization use an ID card (proximity, magstripe, or barcode) or FOB for building or system access that users use? If so, please answers to the following:            i. ID card / FOB type (Manufacturer and Model)?            ii. Do all users at all locations use the same type of ID card or FOB technology? If not, please provide details.            iii. Are user ID cards / FOBs defined in Active Directory or in a Security System? If a Security System:            1. Is this a centralized system or independent per location?            2. What ability is there to export ID card / FOB data to a file?            b. Do all users authenticate to Active Directory for computer and network access?            c. Are there any users who need to copy, print, fax, or scan functionality that are not defined in Active Directory?</p>	<p>Yes we use Prox cards and FOB's.</p> <ul style="list-style-type: none"> <li>i) HID ISOProx II, Model: 1586 and HID MicroProx Tag</li> <li>ii) Yes</li> <li>iii) In a security system, the badge information is not imported into AD.</li> <li>iv) This is a central security system.</li> <li>v) Ability to export user data is unknown.</li> <li>vi) All users do authenticate to AD for computer access and wireless network access.</li> <li>vii) No all users with a need to use these machines are in AD.</li> </ul>
17	<p><b>With respect to auditing:</b>            a. Is there any requirement to track copy, print, fax, and/or scan activity for auditing purposes? If so, please provide details – particularly to reporting requirements.</p>	We audit for meter reading and staff usage. See attached HCPSS Meter Readings file.

	Question	Answer
18	<p><b>With respect to the server environment, client environment, and network infrastructure:</b></p> <p>a. Is the data-center that hosts the organizations servers centralized or regional? Please provide locations and details.</p> <p>b. What Server OS's are used by the organization (Please provide details):</p> <p>i. Windows Server 2003 / 2008 / 2008R2 / 2012 / 2012R2</p> <p>ii. UNIX / Linux</p> <p>iii. Other</p> <p>c. Are the organizations servers physical or virtual? If virtual, what platform: VMware, Microsoft Hyper-V, other (Vendor and Version)?</p> <p>d. Does the organization have specific server requirements involving virtualization technology (HA, FT, VMware Site Recovery Manager, etc...) that should be disclosed for Failover, Fault Tolerant, or Disaster Recovery?</p> <p>e. What Windows client OS's are used by the organization: Windows XP, Windows 7, other? Are these systems: 32bit, 64bit, both?</p> <p>f. Are Mac computer systems used in the environment? If so, please provide details of the Mac OS version(s)? Do all Mac computer system / users authenticate to Active Directory?</p> <p>g. What other desktop systems are used by the organization: Terminal Services, Virtual Desktop, other?</p> <p>h. Are there any specific client-server applications used in the environment that need to be considered for this project? If so:</p> <p>i. Is there any requirement to function with these client-server applications for printing, scanning, or faxing? If so, please provide details.</p> <p>ii. Do these applications generate print jobs so they are associated to the authenticated Active Directory user or to a system account?</p> <p>i. Does the organization have the ability to push printer drivers and software to all client computers systems (Windows and/or Mac's) whether using Group Policies, login scripts, or other methods? If so, please provide details.</p> <p>j. Please provide details about the network connectivity between locations as follows:</p> <p>i. Network bandwidth between locations?</p>	<p>a. We have a central on premise data center.</p> <p>b. Windows 2012, 2012R2, UNIX and Linux.</p> <p>c. We have both physical and virtual servers, the virtual machines use mainly Hyper-V.</p> <p>d. The servers need to fit into our current Backup architecture which uses DPM and Rapid Recovery.</p> <p>e. We currently use Windows 7, and 10, in both x32 and x64.</p> <p>f. We also use MacOSX and all these users authenticate to AD. We also have a need for users of iOS and Chromebook devices to print.</p> <p>g. We do have a small number of users on Terminal Services.</p> <p>h. No.</p> <p>i. We do have the ability to push print drivers to users computers or have them install from a central location.</p> <p>j. Specific Information not available.</p> <p>k. WiFi is available at all locations for staff and consultants. Most staff use WiFi connected laptops.</p> <p>l. Yes, traffic is restricted between locations, but ports can be opened.</p> <p>m. No.</p> <p>n. Yes.</p>

	Question	Answer
	<p>ii. Estimated available bandwidth between locations?</p> <p>iii. What mission critical systems utilize this network connection now?</p> <p>k. Does the organization have WiFi within the environment? If so, is the WiFi available for use for staff, consultants, guests, general public? Please provide details of how the WiFi is required to be used for this project.</p> <p>l. Do firewalls restrict traffic between locations? If so, can ports be open if required?</p> <p>m. Are there any legacy systems or applications that need to be considered for printing, scanning, or faxing?</p> <p>n. Does the organization have any documents or diagrams that would assist in understanding server environment and network infrastructure?</p>	
19	<p><b>With respect to printing:</b></p> <p>a. Will network connected MFDs need to function with this solution for printing? If so, please provide the following:</p> <p>i. List of print languages supported by each device (PCL, Postscript, UFR / UFR II, other)?</p>	<p>Yes, PCL and PS.</p>
20	<p><b>With respect to print server in the environment:</b></p> <p>i. How many print servers are within the environment related to this project?</p> <p>ii. Are the print server centrally located or distributed throughout the environment to various locations? If distributed, please provide locations.</p> <p>iii. Are all of the print servers using a Windows Server OS (2003, 2008, 2012, 2016)?</p> <p>iv. Are there any non-Windows (2003, 2008, 2012, 2016) print servers in the environment?</p> <p>c. Is there any need to consider Failover, Fault Tolerance, and/or Disaster Recovery with respect to printing?</p> <p>d. Please describe any customized in-house applications relative to printing and the requirements that these application function with the printing solution Canon provides.</p> <p>e. If mainframe(s) or other host systems exist in the environment, what requirement is there for this solution to function with the mainframe(s) for printing?</p>	<p>i. Currently we have 80 print servers</p> <p>ii. There is one print server at each location.</p> <p>iii. Print servers use Windows 2012</p> <p>iv. No failover for print servers.</p> <p>v. Specific Information not available</p> <p>vi. No mainframe</p> <p>vii. Yes</p>

	Question	Answer
	f. Does the organization have any documents or diagrams that would assist in understanding printing requirements?	
21	<p><b>With respect to email:</b></p> <p>a. What email system is used by the organization: Microsoft Exchange, Lotus Notes, Novell Groupwise, other? What version is installed?</p> <p>b. Is the email system internal to the organization or hosted?</p> <p>c. Which mail protocols are used for the organizations email system - SMTP, POP3, MAPI, or Exchange Web Services (EWS)?</p> <p>d. Is authentication required to send / receive emails?</p> <p>e. What TCP ports are used to send / receive emails?</p> <p>f. Does the organization have any documents or diagrams that would assist in understanding the email environment?</p>	<p>a. We use MS Exchange (Office 365) for email.</p> <p>b. The email system is hosted.</p> <p>c. SMTP, POP3, EWS.</p> <p>d. Yes.</p> <p>e. Specific Information not available.</p> <p>f. Yes.</p>
22	<p><b>With respect to mobile devices:</b></p> <p>a. Is there any requirement to print from mobile devices within the environment?</p> <p>b. What type of mobile devices exist within the environment that need to be able to print:</p> <p>i. Apple iPhones or other Apple iOS Devices (iPad or iPod Touch)</p> <p>ii. Android Phones or Android Tablets</p> <p>iii. Other manufacturer / models</p> <p>c. Are the mobile devices company owned or personal devices?</p> <p>d. Are company owned mobile devices restricted or locked down by an enterprise management software/solution in any way?</p> <p>e. Do the mobile devices have the ability to operate using WiFi in the environment?</p>	<p>a. Yes.</p> <p>b. IOS and Chromebooks</p> <p>c. Devices are company owned.</p> <p>d. Yes, devices are managed by HCPSS</p> <p>e. Yes.</p>
23	<p><b>With respect to mainframe (IBM AS/400, etc...) or host systems (UNIX, Linux, Sun OS, Citrix, SAP, etc...):</b></p> <p>a. Are there any mainframe (IBM AS/400, etc...) that exist in the environment? If so, please provide the following:</p> <p>i. What mainframe(s) manufacturer / model(s) are present (List each)?</p> <p>ii. Where are the mainframe(s) located?</p> <p>iii. What network connectivity does the mainframe have to the rest of the network environment?</p> <p>iv. What specific mainframe protocols are used / required when functioning with the mainframe(s)?</p>	<p>a. We have no mainframes.</p>

	Question	Answer
	<p>v. What print language (IPDS, AFP, PCL, Postscript, other) does the mainframe generate as print output that is required to function with this solution?</p> <p>vi. Can the mainframe print to Ethernet connected TCP/IP addressed networked printers using LPR?</p> <p>vii. What account (Active Directory user account, system account, other) is associated to print jobs when a user prints from the mainframe? Is this account associated to the print job end to end – from origination on the mainframe to printing on the printer?</p> <p>b. Are there any host systems (UNIX, Linux, Sun OS, Citrix, SAP, etc...) that exist in the environment? If so, please provide the following:</p> <p>i. What host systems are present (List each)?</p> <p>ii. Where are the host system(s) located?</p> <p>iii. What network connectivity do the host systems have to the rest of the network environment?</p> <p>iv. What specific host system protocols are used / required when functioning with the mainframe(s)?</p> <p>v. What print language (UFR / UFR II, PCL, Postscript, other) do the host systems generate as print output that is required to function with this solution?</p> <p>vi. Can the host systems print to Ethernet connected TCP/IP addressed networked printers using LPR?</p> <p>vii. Do users utilize their Active Directory or a system account when using the host system?</p> <p>viii. What account (Active Directory user account, system account, other) is associated to print jobs when a user prints from the host system? Is this account associated to the print job end to end – from origination on the host system to printing on the printer?</p> <p>c. Does the organization have any documents or diagrams that would assist in understanding mainframe and host system environment?</p>	
24	<p><b>With respect to scanning:</b></p> <p>a. Is it necessary that MFDs be able to scan documents? If so, how many MFDs require this function?</p> <p>b. Is there any backend Document Management System (OpenText, SharePoint, etc...) that this solution needs to scan and store documents to? If so, please provide details.</p>	<p>a) Yes.</p> <p>b) No.</p> <p>c) No. We would like to have the capability to scan to network share or cloud .</p> <p>d) Yes, GAL should be available to send e-mails.</p> <p>e) Yes.</p> <p>f) All standard formats</p> <p>g) Yes.</p> <p>h) Very limited use case</p> <p>i) N/A</p>

	Question	Answer
	<p>c. Is there any online system (Dropbox.com, Box.com, etc...) that this solution needs to scan and store documents to? If so, please provide details.</p> <p>d. Is it a requirement that users be able to scan documents to be sent outbound, or to themselves, via email? If so, should the outbound email be sent using an email address defined for the MFD or using the users own email address?</p> <p>e. Is it a requirement that users be able to scan documents to predefined shared network folders or Active Directory Home Folders? Is there a need to browse the folder structure to which documents are to be scanned and deposited to?</p> <p>f. Which document types should users be able to scan to: JPG, TIFF, PDF, Word, Excel, other?</p> <p>g. Is it a requirement that users should be able to use OCR (Optical Character Recognition) during the scanning process to convert scanned documents to editable text?</p> <p>h. Are advanced scanning capabilities (such as: Zone OCR, Batch scanning using barcode separation pages, Forms recognition, Line item extraction, Document image enhancement, etc...) required?</p> <p>i. Please describe any customized in-house applications relative to scanning and the requirements that these applications function with this project.</p> <p>j. If mainframes or other host systems exist in the environment, what requirement is there for this solution to function with the mainframe for scanning?</p> <p>k. Does the organization have any documents or diagrams that would assist in understanding scanning requirements?</p>	<p>j) No.</p> <p>k) We have internal diagrams.</p>
25	<p><b>11. With respect to faxing:</b></p> <p>a. Is it necessary for MFDs be able to send / receive faxes? If so, how many MFDs require this function?</p> <p>b. Is there a centralized fax solution (such as RightFax) that needs to be considered in the environment? If so, please provide the following:</p> <p>i. What fax solution is currently place (Manufacturer / Model / Version number)?</p> <p>ii. Does the current fax solution function by Scan-to-Email, Scan-to-Folder, or via Direct Integration by MFDs to the fax solution? Please provide details.</p> <p>c. Is there any requirement for faxes to be archived for tracking or auditing purposes?</p>	<p>a) Yes, we would like to move away from desktop fax machines.</p> <p>b) No</p> <p>c) No</p> <p>d) We have some internal diagrams.</p>

	Question	Answer
	d. Does the organization have any documents or diagrams that would assist in understanding faxing requirements?	
26	<p><b>With respect to reporting:</b></p> <p>a. Is reporting of user activity (copy, print, scan, and/or fax) required for this solution?</p> <p>b. If reporting is required, what is required to be reported: User, Department, Location, Device (MFD, network connected printer, and/or local printer), Activity (copy, print, scan, and/or fax)?</p> <p>c. Are reports required on a regular basis: Daily, Weekly, Monthly, other...?</p> <p>d. Would reports generated by the system need to be distributed via email (individual or group email) or stored to a shared network folder?</p> <p>e. Is it necessary to have usage activity data able to be exported and used to import into a backend system for chargeback for usage? If so, please provide details.</p> <p>f. Does the organization have any documents or diagrams that would assist in understanding reporting requirements?</p>	<p>a. Yes</p> <p>b. Yes, all things listed.</p> <p>c. Yes, usually Monthly basis and ad hoc.</p> <p>d. Distributed by email.</p> <p>e. Yes</p> <p>f. Yes</p>
27	<p><b>With respect to IT projects:</b></p> <p>a. Please provide information on the organizations IT department as follows:</p> <p>i. Is IT outsourced?</p> <p>ii. Is IT support available at all of the company locations?</p> <p>b. Does the organization utilize a "Test Environment" to test enterprise applications on a limited scale prior to putting solutions into production? If so, please describe your organizations requirements.</p> <p>c. Does the organization have "Change Management Policies and Procedures" that need to be considered and maintained as part of a solution roll-out?</p> <p>d. What are the organizations plans to roll-out this solution specifically with respect to:</p> <p>i. Internal Project Management requirements?</p> <p>ii. Solution implementation roll-out schedule and plan?</p> <p>iii. User Acceptance Testing (UAT) requirements to confirm system functionality prior to or during the roll-out to the full production environment?</p> <p>iv. Days / Hours required to the implementation:</p> <p>1. Monday–Friday / 9am-5pm (Normal business hours)?</p> <p>2. After business hours (Monday-Friday / 5pm-9am)?</p>	<p>a. i. No IT is internal ii. Yes</p> <p>b. Specific Information not available.</p> <p>c. Yes.</p> <p>d. We follow our internal project methodology.</p>



	Question	Answer
	3. Weekend hours (Friday night – Monday morning)? 4. Blackout dates where work cannot be done by CSA staff?	
28	Does the organization have any documents or diagrams that would assist in understanding the way in which the organization implements IT projects?	Yes.
29	Can you provide the number of local printers including the manufacturer, model and average monthly print volume? Also can you provide this list by location?	Yes. See the HCPSS_Printer_Report_8mar19 file.
30	Do you currently have a program in place that provides service or supplies for networked desktop printers or local printers? Can you provide what the advantages or disadvantages are to that program?	Yes and yes.
31	In the past 3 years has a print assessment or printer inventory project been performed by either a current vendor or a third party? By Howard County Public Schools? If so can this data be shared with CSA?	Yes, yes, and yes.
32	Do you have a network monitoring software in place to collect print device and volume data today? Has any vendor or third party ever utilized a network monitoring software to collect printer device and volume data? Can that data be provided to CSA?	Yes, yes and TBD.
33	Will CSA be allowed at some point to perform a print assessment which would include utilizing a network monitoring tool as well as physical site visits of some or all of the locations?	Yes.
34	Would HCPSS consider moving the “RFI Response Due Date” out a few weeks?	The RFI response due date was changed to Friday, March 15.
35	Can you identify the units under a “sign in” via Equitrack for tracking and/or bill back?	Yes.
36	Do you have a list with volumes of the 4000+ desktop printers and if they are networked or local?	Yes and yes.
37	Are all of the locations on the same network? Can you provide the total number of masters used each year on the duplicators?	All locations are on the same logical network See the HCPSS_Printer_Report_8mar19 file.
38	Can you provide the total yearly spend on ink for the duplicators?	Specific information not available.
39	It is our understanding that a print server was set up at each HCPSS location because of bandwidth concerns. Has the network been upgraded that would allow a regionally located print server to be used in a new solution?	Yes. All locations have a min of 1GB connection with 10 GB to Internet. Bandwidth is normally not an issue.
40	Is there a centralized data center that covers all of the schools or does each of the schools have their own servers?	Yes and schools have a Windows Virtual Host that could be used for a printer server if needed. We would like to

	Question	Answer
		reduce the infrastructure in the school and central office. Cloud preferred if less expensive
41	What is the mix of current employee computers? (Mac, PC, Linux, Chromebook, etc.)	Currently the mix is approximately Mac 40%, PC 55% and Chromebook 5%. We are moving away from Macs to Chromebooks and PCs.
42	Are vendors able to submit multiple solutions in response to this RFI?	N/A
43	Is HCPSS looking do be able to implement a chargeback or allotment/quota system for students? If so, would this be for all schools?	Not a charge back at this point, but we would like to the TCO for printing in each school.
44	How many students need access to printing? How many devices per school should students have access to?	Printing should be available in designated areas for students.
45	Regarding the students who will be given the option to print, will you want them to authenticate? User codes or HID proximity cards?	No.
46	Are there IT initiatives around migrating a print solution to the cloud? Are any cloud services like Google Drive, Box, Dropbox or One Drive currently being utilized for storage?	We would like to reduce the demand on the technology staff, consequently a cloud print server solution would be preferred.
47	What functions does HCPSS want to be able to track? (i.e. printing, copying, scanning, faxing.)	We would like to track to determine cost of the services.
48	<b>Paragraph 1.1</b> A new enterprise print management solution for use in all central office locations and schools where the equipment life cycle would be managed in-house by IT. <b>What strategy do you have today? Can you elaborate on how things are currently being managed with regards to the lifecycle? We recommend right sizing the fleet when needed</b>	We have one but would like to expand upon it.
49	<b>Paragraph 1.3.</b> A print policy to reduce print costs and waste. <b>How are you eliminating waste? Where are you buying your paper from? Is there currently any print policy in place to help with those concerns</b>	We would like to move to the least cost printing options.
50	<b>Paragraph 2.3.</b> Utilize best practices to reduce waste, lower costs, and reduce environmental impacts while meeting school system’s printing needs. <b>Do you have practices in place to control color prints? Is HCPSS open to new technology for purposes of reducing energy usage resulting in both positive environmental impacts and cost savings?</b>	No overall strategy for color printing.  Understanding overall printing cost is key to this project.
51	<b>Paragraph 2.4.</b> Streamline management (servicing/maintenance, printer servers, reporting, etc.). <b>How are you managing devices and service tickets today? Do you currently have a preventative maintenance program?</b>	NO PM Program in place. We would like to have one

	Question	Answer
52	<b>Paragraph 2.5.</b> Increase security, control, and accountability. <i>Do you have a print security strategy and can provide details on it?</i>	No but we would like to have one.
53	<b>Paragraph 3.1.2.</b> Usability and access for students and staff <i>What would be the ideal way for your end users to authenticate?</i>	Microsoft AD
54	<b>Paragraph 3.2.1.</b> Solution for rate structure or chargeback model option <i>How many HCPSS employees need to be monitored for charge back purposes? Is charge back for both printers and MFP's and will you/have you considered a mobile printing solution if cost feasible?</i>	No but we would like to know the actual cost of printing per employee. We may charge back at a later time.
55	<b>Paragraph 3.2.3.</b> Salvaging existing equipment <i>Is it your intention for 1 service provider to service all machines despite model or brand?</i>	Unknown at this point. Looking for the lowest cost TCO.
56	<b>Paragraph 3.3.3.</b> Reducing printing cost/waste/demand <i>Can you tell me where most of the color is being used throughout the school system? Is it a specific software or specific departments</i>	N/A
57	<b>Paragraph 3.4.3.</b> A proactive maintenance approach to printer servicing <i>Do you currently have a pro-active preventative maintenance program in place to reduce the amount of service calls and prolong the life cycle of the machines?</i>	No. We would like this option.
58	<b>Paragraph 3.4.4.</b> Managing consumables (toner): supply and replacement <i>What does the current process look like to Identify, order, receive, stock, distribute, install and recycle current consumables?</i>	N/A
59	<b>Paragraph 4.2.</b> MFDs/Duplicators. HCPSS provides the following MFDs/Duplicators to schools: Elementary Schools 1 Large Multifunction 1 Small Multifunction 1 Duplicator Middle Schools 1 Large Multifunction 2 Small Multifunction 1 Duplicator High Schools 2 Large Multifunction 3 Small Multifunction 1 Duplicator <i>Is HCPSS open to eliminating antiquated Duplicators as many school systems have in the past and have those volumes absorbed by the printers/MFP's/Copiers</i>	Yes, especially if the TCO is lower.
60	<b>Paragraph 4.3.</b> See Attachment A Current MFD & Duplicator Inventory <i>We are showing only one duplicator on the inventory list, but it states in this RFI that there is one in every school, what is the correct count on the Duplicators?</i>	Every school has a duplicator.
61	<i>Is the RFP going to awarded solely on best price or will overall scope of service, hardware and solution offerings be considered?</i>	Price will part of the overall score card. Understanding the TCO for all printing is a major driver for this initiative.

**END OF ADDENDUM**