

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT				1. Contract Number CFOPD-14-C-031		Page of Pages 1 17									
2. Amendment/Modification Number Modification 2		3. Effective Date See block 16C Below		4. Requisition/Purchase Request No. Funding Certification		5. Solicitation Caption Modernized Integrated Tax System (MITS)									
6. Issued by: Office of the Chief Financial Officer Office of Contracts 1100 4 th Street SW, Suite E610 Washington, DC 20024				7. Administered By: (If other than line 6)											
8. Name and Address of Contractor (No. street, city, county, state and zip code) Fast Enterprises, LLC 6400 S. Fiddler's Green Circle, Suite 1500 Greenwood Village, CO 80111 ATTN: James Harrison, Partner Email: jharrison@fastenterprises.com Telephone: 877-275-3278				9A. Amendment of Solicitation No.											
				9B. Dated (See Item 11)											
				10A. Modification of Contract/Order No. X CFOPD-14-C-031											
				10B. Dated (See Item 13) July 2, 2014											
DUNS	17-047-2414	FEIN	13-3758609												
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS															
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) completing items 8 and 15, and returning _____ copies of the amendment; (b) acknowledging receipt of this amendment on each copy of the offer submitted; or (c) separate letter or fax which includes a reference to the solicitation and amendment number. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter, telegram or fax, provided each letter or telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.															
12. Accounting and Appropriation Data (If Required)															
Encumbrance Codes:															
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.															
<table border="0" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;">X</td> <td style="width: 95%;">A. This change order is issued pursuant to (Specify Authority): 27 DCMR 3601.2(c) The changes set forth in Item 14 are made in the Contract/Order No. in Item 10A.</td> </tr> <tr> <td></td> <td>B. The above numbered Contract/Order is modified to reflect the administrative changes (such as, changes in paying office, appropriation date, etc.) set forth in item 14, pursuant to the authority of 27 DCMR, Chapter 36, Section 3601.3.</td> </tr> <tr> <td></td> <td>C. This supplemental agreement is entered into pursuant to authority of:</td> </tr> <tr> <td></td> <td>D. Other (Specify type of modification and authority) F.2: Option to Exercise Period of Performance.</td> </tr> </table>								X	A. This change order is issued pursuant to (Specify Authority): 27 DCMR 3601.2(c) The changes set forth in Item 14 are made in the Contract/Order No. in Item 10A.		B. The above numbered Contract/Order is modified to reflect the administrative changes (such as, changes in paying office, appropriation date, etc.) set forth in item 14, pursuant to the authority of 27 DCMR, Chapter 36, Section 3601.3.		C. This supplemental agreement is entered into pursuant to authority of:		D. Other (Specify type of modification and authority) F.2: Option to Exercise Period of Performance.
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	D. Other (Specify type of modification and authority) F.2: Option to Exercise Period of Performance.														
E. IMPORTANT: Contractor is <input checked="" type="checkbox"/> OR is not <input type="checkbox"/> required to sign this document and return <u>1</u> copy to the issuing office.															
14. Description of Amendment/Modification (Organized by UCF Section headings, including solicitation/contract subject matter where feasible.)															
This modification to the contract identified in Block 10A above, is hereby modified as follows in Items 1 - 5:															
ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED															
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A remain unchanged and in full force and effect.															
15A. Name and Title of Signer (Type or print) <i>James G. Harrison, Member</i>				16A. Name of Contracting Officer Drakus Wiggins, CPPO, CPPB											
15B. Name of Contractor <i>James G. Harrison</i>		15C. Date Signed 11-Dec-14		16B. District of Columbia <i>[Signature]</i>		16C. Date Signed 12/29/14									
<small>(Signature of person authorized to sign)</small>				<small>(Signature of Contracting Officer)</small>											

1. The Base Period amount is increased by \$1,300,000 for the addition of Hosting Services, as stated herein, from \$37,400,000 to \$38,700,000. The District anticipates a follow-on modification for an additional four (4) years of Hosting Services, as stated herein, in the total amount of \$5,300,000 for the four-year period.
2. Section B.3.1.1, Base Service Pricing is deleted in its entirety and replaced with the following Section B.3.1.1 Base Service Pricing Revised December 2014 to incorporate the price for MITS Hosting Services.

B.3.1.1 BASE SERVICE PRICING Revised December 2014		
CLIN	DESCRIPTION	PRICE
01	MITS SERVICES (TOTAL FROM PRICING FORM B-1, EXCLUDING DESIRABLES)	\$26,200,000
02	MITS APPLICATION SOFTWARE LICENSES (TOTAL FROM PRICING FORM B-2)	\$11,200,000
02A	MITS HOSTING SERVICES	\$1,300,000
TOTAL PRICE		\$38,700,000

3. Section B.3.1.8(3) Milestone Payment Schedule is deleted in its entirety and replaced with the following Section B.3.1.8(3) Milestone Payment Schedule Revised December 2014 to incorporate the milestone payment schedule for Hosting Services and Associated Technical Administration.

3. Milestone Payment Schedule Revised December 2014

Payment Milestone	Invoice Amount
GenTax Installation	\$5,000,000
Rollout One	
Complete One-time Tasks	\$697,500
Base Configuration Start	\$717,750
Development Start	\$1,794,375
Testing Start	\$2,153,250
Production Cutover	\$2,512,125
Rollout Two	
Base Configuration Start	\$604,000
Development Start	\$1,510,000
Testing Start	\$1,812,000
Production Cutover	\$2,114,000
Rollout Three	
Base Configuration Start	\$581,250
Development Start	\$1,453,125
Testing Start	\$1,743,750
Production Cutover	\$2,034,375
Rollout Four	
Base Configuration Start	\$527,250
Development Start	\$1,318,125
Testing Start	\$1,581,750
Production Cutover	\$1,845,375
Annual Maintenance	
Year 1	\$500,000
Year 2	\$800,000
Year 3	\$1,100,000
Year 4	\$1,600,000
Year 5	\$2,200,000
Performance Bond	
Year 1	\$500,000
Year 2	\$315,000
Year 3	\$220,000
Year 4	\$125,000
Year 5	\$40,000
Hosting Services and Associated Technical Administration	
Year 1 Day 1	\$1,300,000
TOTAL	\$38,700,000

4. Sections B.3.1.8(4) and (5) are add as follows:

4. Hosting Services and Associated Technical Administration Pricing shall include:
 - a) Data center is a Tier III facility with an annual SOC 2 Type II and SOC 3 Audit
 - b) All hardware and software costs for data center equipment with upgrades as required to meet SLAs
 - c) Infrastructure technical support, maintenance and administration
 - d) Help Desk Support
 - e) 5 years maintenance for both hardware and software
 - f) Hybrid cloud at primary site:
 - i. Dedicated servers, switching and storage area networks
 - ii. Shared firewall and F5 load balancing
 - g) Hybrid cloud at secondary site:
 - i. Dedicated servers and switching
 - ii. Shared firewall, F5 load balancing and storage area network
 - h) IPS/IDS and network monitoring
 - i) Private lines from FAST's primary site to both OCTO sites with performance guarantees
 - j) OCTO primary/secondary facility private line demark equipment
 - k) VPN tunnels over the internet from FAST's secondary site to both OCTO sites with bandwidth guarantees for FAST's internet connection
 - l) Monthly 3rd party Security Risk Assessment
 - m) Annual penetration testing by 3rd party
 - n) Offsite tape backups <= 4 TB data
 - i. 4 week on site retention
 - ii. Monthly off-site for 12 months
 - iii. Annual off-site for 7 years
 - o) Base level DR testing
 - p) Based on 99.9 % availability
5. Hosting Services and Associated Technical Administration Pricing shall not include:
 - a) Telecom equipment
 - b) Printing equipment
 - c) Opening/scanning/processing inbound mail
 - d) Single Sign On (SSO) technology
 - e) Client site internet bandwidth

5. Section C.5, Hosting Service is hereby added to the Contract as follows:

C.5 Hosting Service

C.5.1 Introduction

1. The District has procured the GenTax software from the Contractor for use in replacing the current Integrated Tax System (ITS), and has contracted with the Contractor for configuration and integration services. The systems integration contract between the District and the Contractor includes an option for having the Contractor provide hosting services for the District. This contract modification is applicable to items pertaining to the hosted infrastructure and is not applicable to the project work or the GenTax application itself with the exception of application backups, application functionality during disaster recovery and requirements for both application uptime and performance. The listed items are applicable due to dependencies between the infrastructure and application that make these specific requirements difficult to separate. The District intends to execute this option, subject to the following conditions and service requirements:

C.5.2 Data Centers

1. The Contractor shall provide both a primary and a secondary/disaster recovery data center for hosting the District's Gentax environments. Both data centers shall meet or exceed Tier III Data Center requirements as established by the Telecommunications Industry Association's ANSI/TIA-942 standard, and shall have their internal controls reviewed and the effectiveness of their internal controls certified on an annual basis by an independent auditor using SSAE 16 type II reporting and attestation standards.
2. The Contractor shall provide the following documentation upon request by the District:
 - a) Facility specification sheets for the primary and disaster-recovery data centers, and
 - b) An independent service auditor's report of the Data Center SOC 3 reports.
3. The Contractor shall make the facilities available for inspection by District staff or designated DC auditors and IRS staff as required.

C.5.3 Hosted Environments

1. The Contractor shall provide District with the following environments at the Contractor's Primary hosting data center:
 - a) Development/Tools,
 - b) Testing,
 - c) Training,
 - d) Staging,
 - e) Conversion/Performance Test,
 - f) Production, and
 - g) Fast Central Repository (FCR).
2. The Contractor shall provide District with the following environments at the Contractor's Secondary hosting data center:

- a) Production Disaster Recovery, and
 - b) Fast Central Repository (FCR) Disaster Recovery.
3. All hardware (including but not limited to network, server, storage, and security devices) and software licenses (including but not limited to virtualization, operating system, and application licenses) needed for these environments shall be procured by the Contractor. The District's secondary DR site infrastructure will be capable of supporting the user base without degradation in the primary site's SLA user performance requirements, with the exception of any impact due to network connectivity between the Contractor's Secondary hosting data center and the District. The Contractor's Secondary hosted data center will be scaled back in terms of total server count, so batch processing may take longer. However, the Contractor will have sufficient shared capacity to expand the Contractor's secondary hosted data center capabilities in the event that a failback to the primary site is not expected within a week. After a failover to the disaster site a joint meeting will be held to assess the situation and determine if due to the anticipated duration if any additional items should be addressed, for example acquiring dedicated circuits for the Contractor's secondary hosted data center. In the event that it is determined environments in addition to Production are required, the Contractor will work with the District to bring the additional environment up within a reasonable timeframe.
 4. The Contractor shall stand up all servers, install all operating systems, and install and configure all application software needed for these environments. The Contractor shall host the GenTax Tax application in its entirety, including the Taxpayer Access Portal.
 5. The technology architecture at the primary data center shall be comprised of multiple Intel-based, high-performance servers running in a virtual host cluster for high availability and load balance. Each virtual "guest" shall utilize Microsoft Windows Server 2012+ as the server operating system, and Microsoft SQL Server 2012+ as the relational database management system (RDBMS). The technical architecture shall be designed to have no single point of failure. Redundancy shall be provided by using a server cluster or by having multiple servers that perform the same function configured for load-balancing.
 6. Dedicated servers shall be used for the DC-MITS instance and shall be optimized for use as virtual host servers. The host servers shall be balanced for scalability and reliability. Host servers shall never be overloaded with too many virtual guest machines. Host servers and other infrastructure components shall meet or exceed the specifications provided in the Platform Hardware/Software Requirements Section of the Contractor's Proposal dated May 10, 2013 incorporated into the Contract.
 7. Virtual guest machines shall be strategically placed to run on the appropriate host server based on load requirements. Sufficient host resources (i.e., CPU, memory, storage) shall be made available to each virtual guest server to meet and/or exceed performance and capacity requirements.

8. Environments shall be made available (e.g., rolled out) to the District per the schedule defined in the Contractor's Project Management Plan.

C.5.4 Migration of lower Environments from OCIO Server Room to the Contractor's Hosting Center

1. The Contractor shall migrate all lower environments (e.g., DEV) that have been implemented in the OCIO server room to the Contractor's primary hosting center. The migration shall be done without loss of data or interruption to development activities.

C.5.5 Connectivity between District and the Contractor Hosting Center

1. The Contractor shall provide an end-to-end connectivity solution to connect the District GenTax environments in the Contractor's primary and secondary hosting centers to the District network; and shall provide a connectivity solution to connect the District GenTax environments in the Contractor's primary and secondary hosting centers. The District operates two data centers - a primary and a secondary/DR data center. The Contractor connectivity solution shall provide connectivity to both of these data centers.
2. The Contractor shall provide connectivity to the Taxpayer Access Portal application from the Internet for use by citizens and OCFO staff. The Contractor shall ensure that in the event of a failover from the primary the Contractor hosting center to the secondary the Contractor hosting center, Taxpayer Access Portal customers will be automatically routed to the active Taxpayer Access Portal application site. The Contractor shall ensure that the traffic to and from the Taxpayer Access Portal site is encrypted and that access to this site is secured and compliant with requirements of District law, policies and current practices; and with IRS Publication 1075 requirements.
3. The connectivity between the Contractor's primary hosting center and the District shall be implemented using either a point-to-point circuit, a MPLS circuit, or some other form of connectivity with guaranteed security, bandwidth, and latency. The connectivity between the Contractor's primary hosting center and the Contractor's secondary hosting center shall be implemented using either a point-to-point circuit, a MPLS circuit, or some other form of connectivity with guaranteed security, bandwidth, and latency. These two circuits shall provide redundancy for one another. The connectivity between the Contractor's secondary hosting center and the District shall be implemented using either a site-to-site SSL connection across the Internet or a point-to-point circuit, a MPLS circuit, or some other form of connectivity with guaranteed security and bandwidth.
4. In the event of a failover from the Contractor's primary to the secondary hosting site, the connectivity solution shall automatically route traffic from the District to the Contractor's secondary hosting center. In the event of a failover from the primary District data center to the secondary District data center, the connectivity solution provided by the Contractor shall route GenTax traffic to the active the Contractor hosting center.
5. The Contractor connectivity solution shall ensure that the data is encrypted in transit, and shall comply with all other IRS Publication 1075 requirements for protection of data in transit.

6. The Contractor shall work with the Office of the Chief Technology Officer (OCTO) to terminate their connectivity solution on the DC-NET demarcation points managed by OCTO.
7. The Contractor shall procure and deploy all network and security devices (including but not limited to firewalls, routers, switches, and intrusion protection systems) required to implement the connectivity solution; except where the network and security devices at the OCTO demarcs are made available by OCTO. The Contractor shall procure and coordinate the deployment of WAN connectivity between the Contractor's hosting centers and the OCTO network demarcation points.
8. The Contractor shall provide bandwidth and latency metrics for the network segments under the Contractor's control.

C.5.6 Managed Services

1. The Contractor shall provide managed services needed to monitor, maintain, and administer the Contractor's hosted environments. These services includes system administration, application administration, patching and maintenance service, monitoring and alerting services, release management, change management services, infrastructure management, routing and firewall services, security and intrusion prevention, and a high-speed network backbone for virtual hosts and database servers. The Contractor shall be responsible for building, maintaining, and managing the hardware and software at the data center(s). The following hosted services shall be included, but not limited to:
 - a) Maintain and monitor data backups
 - b) Hardware firmware updates
 - c) Server updates and critical patches
 - d) Virtualization management and security updates
 - e) SSL certificate management
 - f) Sufficient rack space and power for hosted hardware
 - g) Network services (routing, security, VLANs, zoning, etc.)
 - h) Data replication management
 - i) Infrastructure access control
 - j) Compliance
 - k) Penetration testing for major application versions
 - l) Secure file transfer
 - m) Redundant primary internet feeds

C.5.7 Security

1. The Contractor shall comply with all requirements of the IRS Safeguards Pub. 1075. This includes but is not limited to incident response, application security controls, media controls, physical and logical access controls, environmental controls, audit controls. The Contractor shall make their facility and hosted environments and services available to the IRS for purposes of compliance review. The Contractor shall respond promptly to all compliance findings noted by IRS or District

auditors, and shall complete all mitigation activities within the timelines established by the IRS and the District.

2. As part of Pub. 1075 compliance, the Contractor shall create, provide, and maintain a Safeguard Security Report (SSR) for the Contractor's hosting environments and assist the District in the creation of the District's SSR covering the GenTax applications contained therein. The SSR will follow the IRS template on the Office of Safeguards website: www.irs.gov/pub/irs-utl/SSRTemplate.docx.

C.5.8 Disaster Recovery

1. The Contractor shall provide a comprehensive Disaster Recovery (DR) plan to the District. This plan shall provide a detailed description of the DR services that the Contractor shall provide to ensure continuity of operations in the event of a failure of one or more servers, or of a loss of the entire facility. DR services shall include, but not limited to, backup to disk or tape of all environments; SAN and virtual machine replication from primary to secondary hosting centers; recovery from backup of individual servers or data stores; and failover from the Contractor's primary to the Contractor's secondary hosting data center. Application functionality of GenTax shall be equivalent to the primary site with the exception of items dependent on external touch points such as interfaces. Adjustments to application features in the Contractor's secondary hosted data center may be required based on availability of the District's infrastructure, for example if Active Directory is unavailable then authentication would have to be switched over to GenTax based passwords.
2. The Contractor's secondary site shall be able to support interfaces based on the following schedule from the starting point of a failure that triggers a transfer to the Contractor's secondary hosted data center:
 - a) Payment interfaces on the 2nd day
 - b) Individual tax return interfaces on the 4th day
 - c) Refund interfaces on the 5th day
 - d) Business return interfaces on the 7th day
 - e) ASPECT interfaces on the 7th day
 - f) Printing on the 7th day
3. Any interfaces not listed above will be evaluated, prioritized, and timeframes determined by the District in consultation with the Contractor after the disaster. The Contractor shall make a best effort to get the prioritized interfaces functioning with an agreed on timeframe.

C.5.9 Extended Backup Retention

1. The Contractor shall archive backup media in an off-site archive in accordance with the following schedule:
 - a) Weekly full and incremental backups for the last three months;
 - b) Monthly full backups for the last 12 months; and
 - c) Annual full backups for the last 7 years.
2. This schedule shall be in effect as of the effective start date of the hosting services.

C.5.10 Work Performance

1. All work related to Section C.5, Hosting Services shall be performed by the Contractor's employees.
2. No Federal tax returns will be submitted by the District to the Contractor. All data made available shall be used only for the purpose of carrying out the provisions of this Contract. Information contained in all material shall be treated as confidential and shall not be divulged or made known in any manner to any person except as may be necessary in the performance of this Contract. Inspection by or disclosure to anyone other than an officer or employee of the Contractor is prohibited.
3. All tax data shall be accounted for upon receipt and properly stored before, during, and after processing. In addition, all related output and products shall be given the same level of protection as required for the source material.
4. The Contractor shall not subcontract any work involving returns or return information furnished under this Contract.
5. The Contractor shall maintain a list of employees with authorized access, which shall be provided to the District and, upon request by the District, to other designated parties.
6. The District reserves the right to exercise provisions of the Contract for terminate for default and terminate the Contract, in part, for Section C.5, Hosting Services if the Contractor fails to provide the safeguards described above.
7. All the Contractor employees to whom data is or may be disclosed shall be notified in writing that the data can be used only for a purpose and to the extent authorized herein, and that further disclosure of any such data is prohibited.

C.5.11 Performance Testing

1. The Contractor shall perform a performance test of the production environment and shall tune the network and server infrastructure and the connectivity solution to ensure that application performance is compliant with agreed-upon service levels before the first go-live decision point which will be 90 days after the effective date of this Contract Modification.

C.5.12 Service Level Agreements

1. Hosting:
 - a) The Contractor shall architect, implement, maintain, administer, monitor and troubleshoot the Contractor's connectivity solution, the hosted networking and server infrastructure, and critical components supporting the application environments to ensure that the following service levels are satisfied:

- A. 99.9% uptime of application infrastructure to users during business hours.
 - i. Business hours for internal-facing applications are from 7 AM EST to 8 PM EST Monday through Friday except during tax season (January 1 – April 15). During tax season business hours will include weekends, however the following shall be excluded from the uptime measurements:
 - 1. Pre-arranged maintenance windows
 - ii. Business hours for public-facing application infrastructure is 24 hours a day, 7 days a week, 365 days a year, however the following shall be excluded from the uptime measurements:
 - 1. Pre-arranged maintenance windows, including a monthly patching window
 - 2. Daily environment maintenance during a timeframe approved by the District.
These maintenance periods shall average under 15 minutes and due to the high availability configuration the majority of user requests during this period are processed without delay or error.
 - B. 95% of backups completed on time per the following schedule. Backups include, but are not limited to, device configurations, system configurations, application configurations, user accounts, user permissions, application data, CRM records, and images.
 - i. Full backup once a week
 - ii. Incremental backup every night that full is not running
 - iii. Hourly SQL Server transaction log backups
 - C. 95% of all production user transactions will complete (click through) in <1 second.
 - D. Production Recovery Time Objective is 24 hours.
 - E. Production Recovery Point Objective is 2 hours.
2. Technical Help Desk:
- A. The Contractor shall ensure that all Priority 1 (P1) and Priority 2 (P2) requests for assistance to the Contractor's Technical Help Desk are responded to within 15 minutes, response shall be via phone for all P1 and P2 requests, if District Point of Contact cannot be reached the response shall be retried and escalated to the next person in the District hierarchy as necessary until a warm hand-off is achieved.
 - B. Priority 1
 - i. If the System is down, the SLA for uptime requirement is applicable.
 - ii. If the System is degraded, the SLA for performance is applicable.
 - C. Priority 2
 - iii. If there is a major infrastructure component down and a work around exists, and there is significant business impact with many users impacted, such as firewall rules preventing interface connectivity, then resolution shall be within 4 hours or as approved by the District.
 - D. Priority 3
 - iv. If there is a minor infrastructure defect and a workaround exists with minor business impact, usually one user impacted, then resolution shall be within 24 business hours.
 - E. Priority 4

- v. Request for hosted infrastructure enhancement and workaround exist with the business inconvenienced, usually one user impacted, then resolution shall be as approved by the District.

3. Provisioning of Environments:

- A. The Contractor shall provision new environments as scheduled in the Contractor's Project Management Plan 100% of the time. The Contractor shall provision new environments upon request of the District within 60 calendar days of the request 100% of the time.

4. Refreshing of Environments:

- A. The Contractor shall refresh environments as scheduled in the Contractor's Project Management Plan 100% of the time. The Contractor shall refresh existing environments upon request of the District within 14 calendar days of the request 100% of the time.

5. Connectivity:

- A. The Contractor's primary site bandwidth and latency of the connectivity solution shall be compliant with performance levels 95% of the time, sufficient to ensure required performance of the application for the target population of users during peak utilization periods. Availability of the connectivity solution shall be 99.9% during working hours. Specific details of bandwidth and latency will be approved by the District.

6. Service Level Metrics Reporting:

- A. The Contractor shall measure performance against service level targets described in this section on a daily basis, shall calculate monthly averages for performance for each metric, and shall provide monthly, quarterly, and annual performance reports on these averages to the District.
- B. The following formulas shall be used to calculate metrics:

Metric	Calculation
Production Uptime – internal applications	(Hours application is available to users per month) divided by (total business hours per month)
Production Uptime – external applications	(Hours application is available to users per month) divided by (24 days in the month)

Backups	(# backups completed on schedule per month) divided by (number of full backups per month + number of incremental backups per month + number of SQL Server Transaction Log backups per month)
Production Performance – user	(number of days in a month that the user transaction average for completion in < 1 second was greater than or equal to 95%) divided by the total number of working days per month) This performance metric shall be inclusive of all online application features including reporting and image retrieval.
Production RPO	Amount of hours of data lost in an outage
Production RTO	Average time per outage event from declaration of outage to restoration of service
Help Desk Response to P1 and P2 Call/Email	(number of times per month a request for service was responded to in less than 15 minutes) divided by (Total number of requests received per month)
Help Desk P1 Incident Response	These incidents represent a system down or degraded and thus the Production Uptime and Performance requirements are applicable.
Help Desk P2 Incident Response	(number of times per month a P2 request was resolved in ≤ 4 business hours) divided by (Total number of P2 requests received per month)
Provisioning	# of times a request for provisioning an environment was completed behind schedule
Refreshing	# of times a request for refreshing an environment was completed behind schedule
Bandwidth	Average bandwidth of connection per month, tested daily
Latency	Average latency of connection per month, tested daily
Connectivity Availability	(Hours circuit is up per month) divided by (total business hours per month)

7. Earn-Backs:

- A. In the event that the Contractor fails to satisfy one or more service level performance targets in any given month, the Contractor agrees to allow the District to access a holdback for that month as follows as a reasonable equivalent for the degradation of service:
 - i. Up to a maximum of 5% of the hosting revenue for that month shall be held back.
- B. The Contractor agrees to allow the District additional holdbacks for failure to achieve required RTO/RPO objectives, as described in the chart below.
- C. In the event that the Contractor meets or exceeds all service level performance targets in a consecutive three-month period, earn-backs shall be credited to the Contractor for use against any prior-period or future-period holdbacks, as follows:
 - i. For each three-month period, 2.5% of the hosting revenue for one month shall be credited to the Contractor for application against a prior-period or future-period holdback assessment.
- D. Credits shall not roll over to the next fiscal year. Credits shall be earned and used in the same fiscal year. This provision is an earn-back credit, not a bonus. If there have not been any holdbacks assessed in a fiscal year, then the credit will be taken off the books at the end of the fiscal year.
- E. For example, if the Contractor fails to satisfy performance targets in October 2015, there will be a 5% holdback from the monthly payment for October. If the Contractor satisfies performance targets in November 2015, December 2015 and January 2016, the Contractor will be paid 50% of the holdback from October in the January payment. If the Contractor satisfies performance targets in February 2016, March 2016 and April 2016, the Contractor will be paid 50% of the holdback from October in the April payment. If the Contractor satisfies performance targets in May 2016, June 2016 and July 2016, the Contractor will be credited with 5% of a monthly payment but will not receive payment for this credit in July. If the Contractor fails to satisfy performance targets in August 2016, they will be assessed a 5% holdback and granted a 2.5% credit. If the Contractor continues to satisfy performance targets for the rest of FY2016, the credits will expire unused in October 2016.
- F. RTO/RPO Objectives Chart:

Metric	Environment	Performance Target	Required Service Level	Holdbacks for Failure to Perform
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Metric	Environment	Performance Target	Required Service Level	Holdbacks for Failure to Perform
Application Availability	Prod	99.9% during business hours	100%	5% of monthly hosting charge
Backup Completion	Prod	95% of all scheduled backups completed	100%	5% of monthly hosting charge
Backup Completion	Non-Prod	95% of all scheduled backups completed	100%	5% of monthly hosting charge
Production GenTax Application Performance		<1 second screen	>=95%	5% of monthly hosting charge
RTO		<=24 hours	100%	5% of monthly hosting charge plus 100% of daily fee for each additional day that system is not restored
RPO		<=2 hours	100%	5% of monthly hosting charge plus 100% of daily fee for each day of lost data
Help Desk P1		N/A	N/A	Covered by the application availability and performance requirements

Metric	Environment	Performance Target	Required Service Level	Holdbacks for Failure to Perform
Help Desk P2		<=4 business hours	>95%	20% of monthly hosting charge

C.5.13 Scalability

1. The Contractor shall scale server capacity either vertically or horizontally as needed to ensure performance SLAs are achieved during peak performance periods.

C.5.14 Monitoring and Alerting

1. The Contractor shall monitor and provide automated alerts to District on system down events. The Contractor shall monitor resource utilization against agreed-upon thresholds and alert District when thresholds have been exceeded. The Contractor shall monitor system capacity (CPU, RAM, storage) and notify District if trending indicates capacity needs to be increased. Specific reporting and alerting requirements to be defined by mutual agreement during the initial GenTax implementation phase.

C.5.15 Change Management

1. The Contractor shall provide Change Management services for the hosting infrastructure, including change control processes and procedures, customer notification procedures, testing of changes, migrating changes to production from lower environments, Environment upgrades and patching, back out process, and coordinating with District to approve changes and coordinate timelines before they are deployed.
2. All infrastructure change management services in the production environment shall occur during scheduled maintenance periods after normal business hours to minimize user impact. Maintenance periods shall be excluded from the 99.9% service level agreement.
3. Infrastructure changes shall be first tested in the lower environments, documented, and tracked. Notifications shall be provided to the appropriate personnel when changes have been scheduled to be applied in production.

C.5.16 Governance

1. The Contractor shall provide governance services to District, including weekly/monthly status meetings and reports, utilization trend reports (including bandwidth), quarterly reviews of issues,

open tickets, performance and capacity trends, account management services, and escalation services. Specific details on these services shall be approved by the District.

C.5.17 Certification and Accreditation

1. The Contractor shall work with District staff to conduct a Certification & Accreditation (C&A) review prior to going live which will be 90 days after the effective date of this Contract Modification, shall submit a mitigation plan to District for all issues uncovered in the C&A, and shall execute the mitigation plan as approved by the District for all issues uncovered in the C&A.

C.5.18 Interfaces to External Systems

1. The Contractor shall support interfacing the hosted environments with other application systems within the District network, or outside the District network. The Contractor shall provide a secure external interface to users on the Internet for self-service functions.

C.5.19 Exit from Hosting

1. If the District decides to exit from hosting, the Contractor shall provide data in a format and media approved by the District. Further, the Contractor shall assist the District in migrating the hosted environments to another hosting provider so as to minimize downtime, preserve continuity of operations, and ensure no loss of data. The details of the services to be provided shall be approved by the District during the exit planning stage and shall be at no additional cost to the District.